DG-SC2600/
DG-SC2600W

IP Surveillance Camera

User Manual

V1.3

2011-12-11

As our products undergo continuous development the specifications are subject to change without prior notice.

COPYRIGHT

Copyright ©2012 by this company. All rights reserved. No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language or computer language, in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual or otherwise, without the prior written permission of this company.

This company makes no representations or warranties, either expressed or implied, with respect to the contents hereof and specifically disclaims any warranties, merchantability or fitness for any particular purpose. Any software described in this manual is sold or licensed "as is". Should the programs prove defective following their purchase, the buyer (and not this company, its distributor, or its dealer) assumes the entire cost of all necessary servicing, repair, and any incidental or consequential damages resulting from any defect in the software. Further, this company reserves the right to revise this publication and to make changes from time to time in the contents thereof without obligation to notify any person of such revision or changes.

Trademarks:

DIGISOL™ is a trademark of Smartlink Network Systems Ltd. All other trademarks are the property of the respective manufacturers.

Safety

This equipment is designed with the utmost care for the safety of those who install and use it. However, special attention must be paid to the dangers of electric shock and static electricity when working with electrical equipment. All guidelines of this and of the computer manufacturer must therefore be allowed at all times to ensure the safe use of the equipment.

INDEX

1 Product Information 5
1.1 Product Introduction 5
1.2 Product Features 6
1.3 Preparation Before Installation 7
1.4 Hardware Description 8
1.5 Camera Installation 13
1.6 Locate the IP Address of this IP Camera 14
1.7 Using Camera Admin Software to Locate Camera 18
1.8 Log Onto Web Management Interface 24
2 Using Web Management Interface 27
2.1 Camera Settings 27
2.2 Video 30
2.2.1 Sensor 31
2.2.2 MJPEG 32
2.2.3 MPEG4 32
2.2.3 MPEG4 33
2.2.4 H.264 34
2.2.5 OSD 35
2.3 Network Settings 36
2.3.1 LAN 37
2.3.2 WLAN (Wireless Model) 39
2.3.3 Dynamic DNS 43
2.3.4 UPnP 44
2.3.5 LoginFree 46
2.3.6 RTSP 47
2.4 Motion Detection 48
2.4.1 Motion Detection 49
2.4.2 Motion Region 51
2.4.3 Email 53
2.4.4 FTP Configuration 55
2.4.5 SD Card Configuration 56
2.5 System Info 57
2.5.1 Camera Information 58
2.5.2 Date / Time Setting 59
2.5.3 Utilities 60
2.5.4 Status 61
2.6 Account 62
2.7 SDHC 63
2.7.1 Status 64
2.7.2 Space Alarm 64

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

2.7.3 File Management 66
3 Using SKYROS Surveillance Manager Software 67
3.1 Installing SKYROS Surveillance Manager Software 67
3.2 Using SKYROS Surveillance Manager software 71
3.3 Configuring the SKYROS Surveillance Manager software 74
3.3.1 Configuring cameras 74
3.3.1.1 'Camera' tab 75
3.3.1.2 Schedule Recording 77
3.3.1.3 Audio 79
3.3.1.4 Motion Recording 80
3.3.2 General Settings 81
3.3.2.1 'General' tab 81
3.3.2.2 'E-Mail Setting' tab 83
3.3.2.3 Security 85
3.3.2.4 About 86
3.4 Change Display Layout 87
3.5 Full-screen mode 90
3.6 Scan 91
3.7 PTZ 92
3.8 Snapshot 93
3.9 Recording 93
3.10 Video Playback 94
4. Obtaining a free No-IP account 95
5. IP Camera behind a router/firewall – Sample Configuration 98
5.1 Setup Dyndns Dynamic IP address Mapping 98
5.2 Open Ports Required by IP CAM 99
5.3 DMZ Settings 100
6 Using Cellphone as Image Viewer 101
6.1 iPhone 101
6.2 Skyros iView application for Android devices 104
6.3 Skyros iView application for iPhone/ iPad 113
7. Windows Vista / Windows 7 UAC Configuration 125
8 Appendix 128
8.1 Specifications 128
8.2 Troubleshooting 130
8.3 Glossary 133

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

1 Product Information

1.1 Product Introduction

This IP Surveillance camera is an ideal product for all kinds of video-surveillance purposes, like home/office safety, kid/pet monitoring and remote video acquisition etc. Unlike conventional close-circuit video camera; you're not limited to the length of the cable. Once this IP camera is connected to Internet, you can receive video from anywhere in the world where Internet access is available.

If installing an Ethernet cable for the surveillance camera is not feasible, we have a wireless version of the IP surveillance Camera. This camera can connect to the network wirelessly and communicate to the monitoring desktop/PC. The wireless camera would require only the 12V power provided by the power adapter that comes with the product package.

The wireless IP Surveillance Camera is highly secure unlike conventional analog wireless camera, in which case video can be intercepted by anyone with a compatible video receiver. The required security can be achieved by using data encryption (WEP & WPA). All video transmitted over the air is encrypted preventing any intelligent interception.

Setting up a secure wireless Camera is not a very complex process. The wireless IP Camera supports WPS (Wi-Fi Protected Setup), which allows users to setup wireless security by just pressing a button or keying in an 8-digit number.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

1.2 Product Features

- No pre-loaded software required - all you need is a browser like Internet Explorer 6 (and above, with plugin installed).
- With supplied SKYROS Manager software, you can connect up to 16 video cameras and view images captured by every camera at the same time.
- Supports 3 video resolutions: MJPEG and H.264 SXGA (1280 x 1024), VGA (640 x 480) and QVGA (320 x 240); MPEG4 XGA (1024 x 768), VGA (640 x 480) and QVGA (320 x 240).
- Anti-flicker function (eliminates flash caused by fluorescent lights, 50 / 60Hz selectable).
- Audio function, suitable for applications like video conference or environment monitor.
- Wired and wireless network (802.11b / 802.11g / 802.11n) supports up to 100Mbps for wired network.
- Wireless data encryption (WEP / WPA)
- Supports DHCP and PPPoE protocol, you can also assign a fixed IP address to the camera.
- Supports Dynamic DNS (used to allocate the IP camera's Internet address, when the ISP you're using does not assign you a fixed Internet address).
- Supports UPnP, Windows XP (and above) will discover this IP camera in network neighbor automatically.
- Send captured picture and video by Email or FTP when motion is detected.
- Configurable motion detection sensitivity (from most sensitive to least sensitive).
- Built-in clock, date and time information will be recorded with every captured picture / video clip (also supports auto time synchronization via network time protocol).
- Upgradeable firmware.
- Supports up to 16 users, and you can set different password to different users.
- Usage and event logging.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

1.3 Preparation Before Installation

Package Contents

- IP Camera
- One Antenna (Wireless model)
- Power Adapter (12 V DC, 1A)
- Patch Cord
- Installation Guide CD (includes User Manual, QIG & utility)
- Accessory Kit

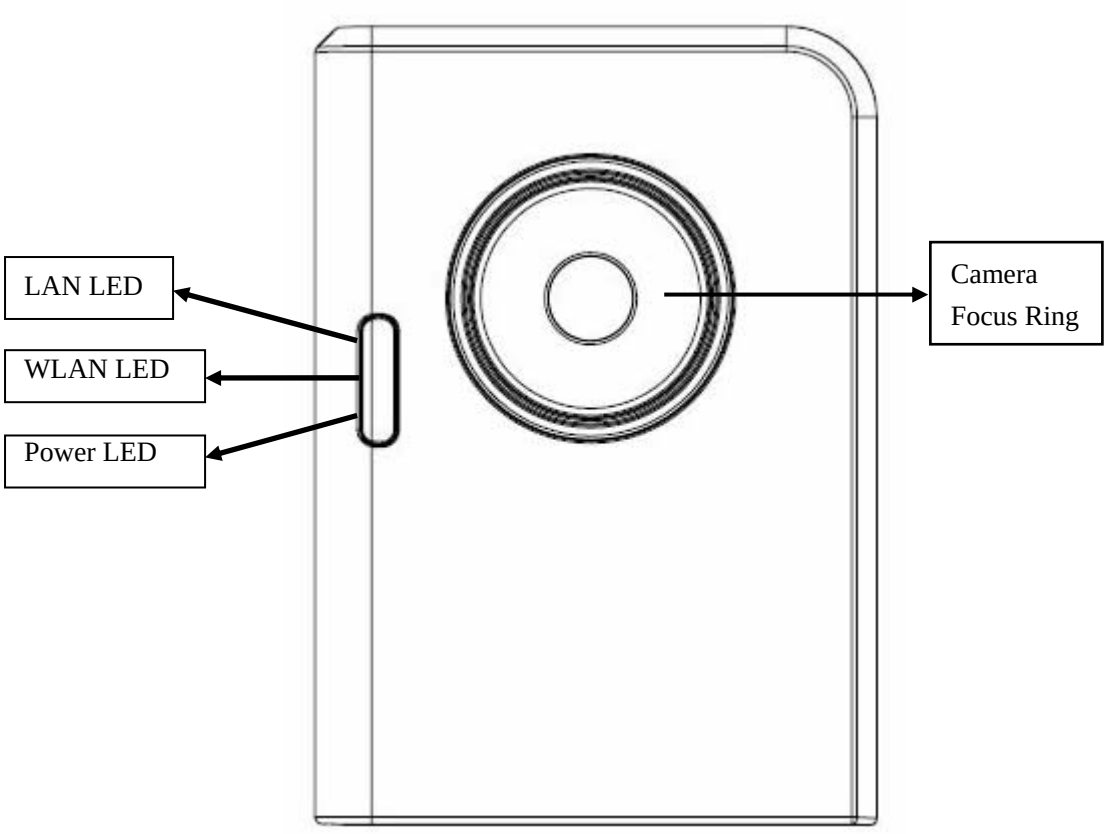
System Requirements

- Computer with Windows® 7, Vista or XP
- PC with dual core or above; at least 2GB RAM
- Internet Explorer 6.0 or above
- Existing 10/100 Ethernet-based network or wireless 802.11b/g/n network(for wireless model only)

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

1.4 Hardware Description

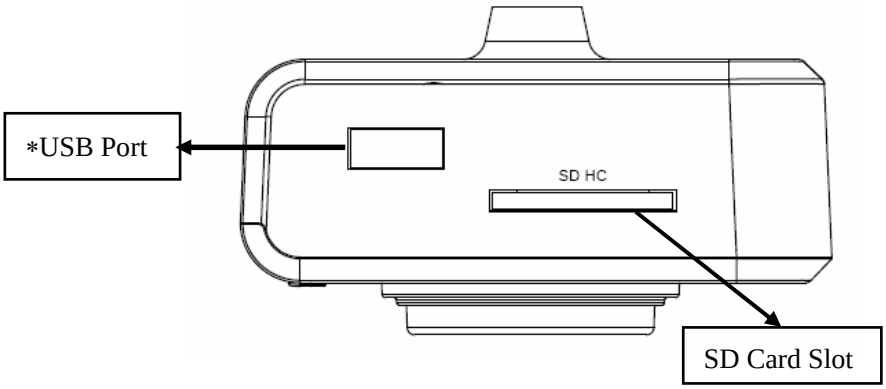
Front View



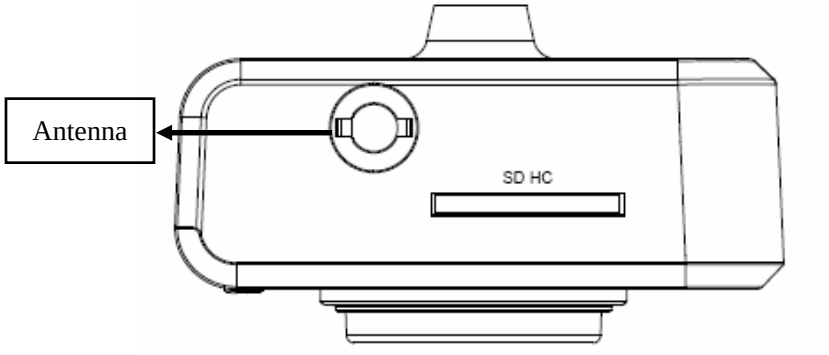
LAN LED: Indicates LAN activity.
WLAN LED: Indicates Wireless LAN activity (Not Applicable for DG-SC2600.)
Power LED: Indicates power status.
Camera: Video camera with lens.
Focus Ring: Adjusts focus by rotating it to get a clear image.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

Top View – Wired Model



Top View – Wireless Model

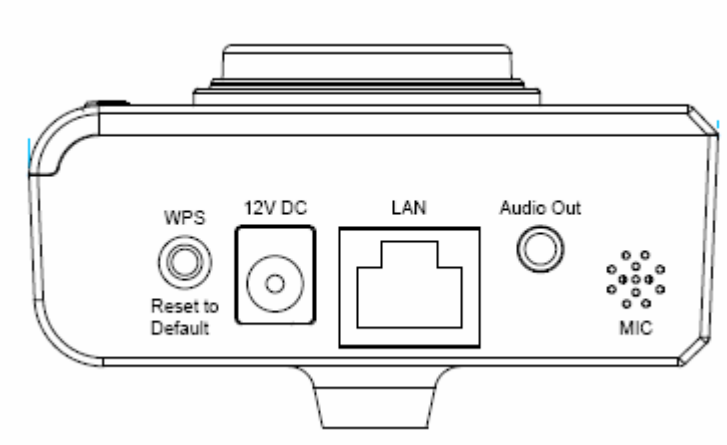


SD Card Slot: Accepts SD / SD-HC memory card for image / video storage.
USB Port: Connects to certain wireless module.
Antenna Base: Connects to supplied antenna.

* The USB port on DG-SC2600 (Wired model) is for future application.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

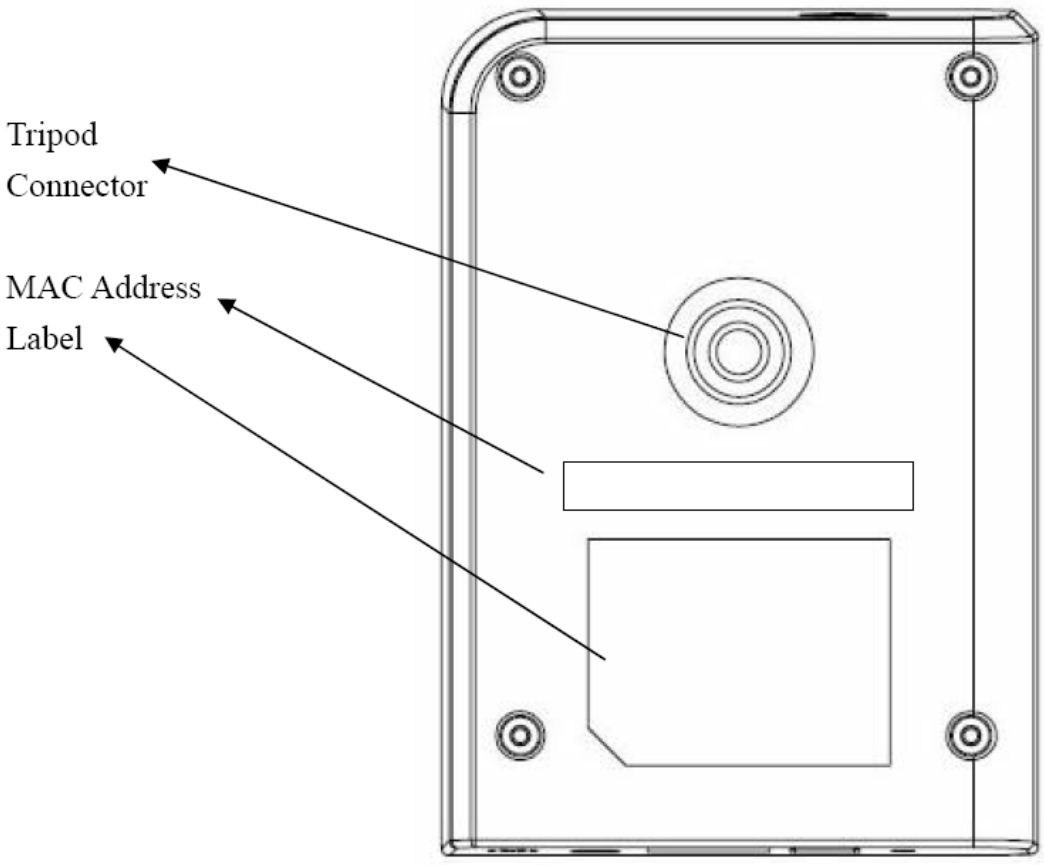
Bottom View



WPS: Click the button on IP Cam and click it on the AP you want to connect wirelessly. (Only applicable for DG-SC2600W)
Reset to Default: Press and hold the reset button until all the LED's on the camera go off so as to reset the camera settings.
Power Connector: Connects to 12V DC power adapter.
Ethernet Connector: Connects to your local area network.
Audio Connector: Connects to external speaker for audio output.
Microphone: Built-in microphone for voice pick-up.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

Back View



Tripod Connector: Connects to any standard tripod / camera wall holder.
MAC Address Label: Shows the MAC address of this IP camera. Useful when you can't locate the camera on the network.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

LED Indicators descriptions

LED Name	Status	Description
Power	Off	Camera is not powered (camera off).
	On	Camera is correctly powered (camera on).
LAN	Off	LAN port not in use.
	On	LAN port in use.
	Flash	Transferring data via LAN port
WLAN	Off	Wireless LAN not in use.
	On	Wireless LAN in use.
	Flash at low speed	Waiting for WPS connection from AP and flash speed is once a second.
	Flash	Transferring data via wireless LAN.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

1.5 Camera Installation

Please follow the instructions mentioned below to set up your IP camera.

1. Unpack the product package and check if anything's missing.

2. Connect the Ethernet cable to your local area network, and connect the other end to the LAN jack of this IP camera.
   NOTE: You can skip this step if you plan to use wireless LAN only.

3. Plug the power adapter to the wall socket, and connect the power connector to the power jack located at the bottom of the IP camera.

4. For the wireless version, connect the antenna to the antenna bases, which is located at the top of this IP camera.

5. Place the camera at a secure place, and point the camera to the place you wish to monitor. If you wish to hang the camera on the ceiling or wall, please use the tripod connector.

6. Launch Internet Explorer on your computer, and follow the instructions given in the next section to set the IP camera.

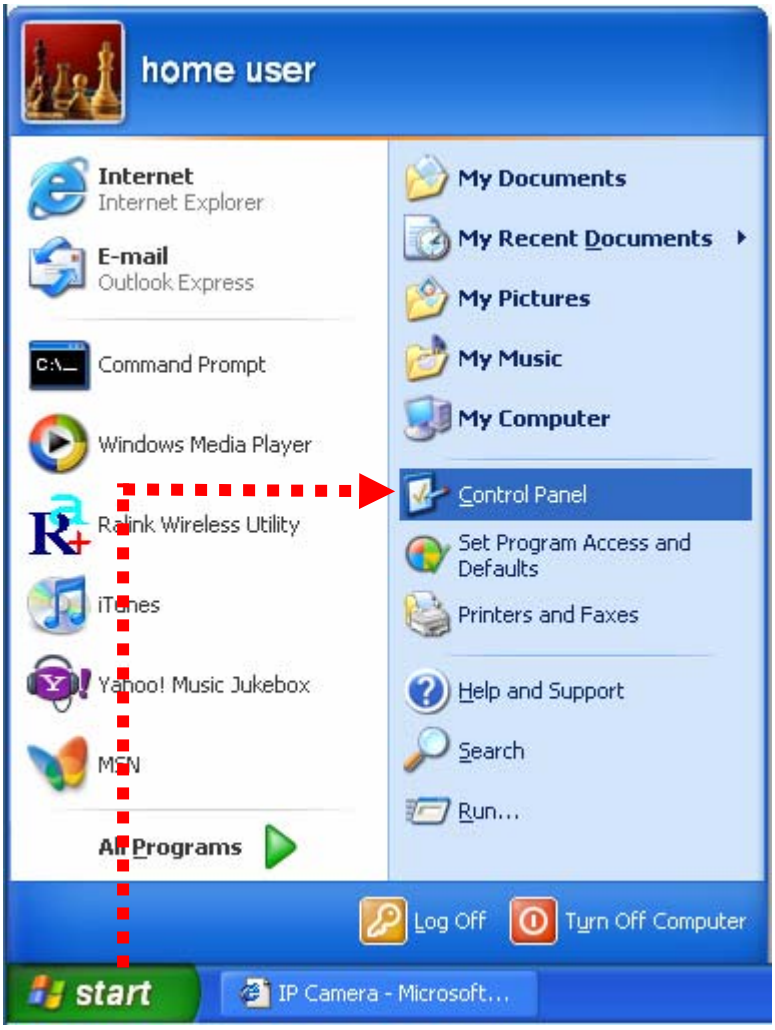
☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

1.6 Locate the IP Address of this IP Camera

Default IP address of this IP camera is 192.168.2.3. If you wish to assign another IP address to this IP camera, you have to log onto the web configuration interface of the camera first.

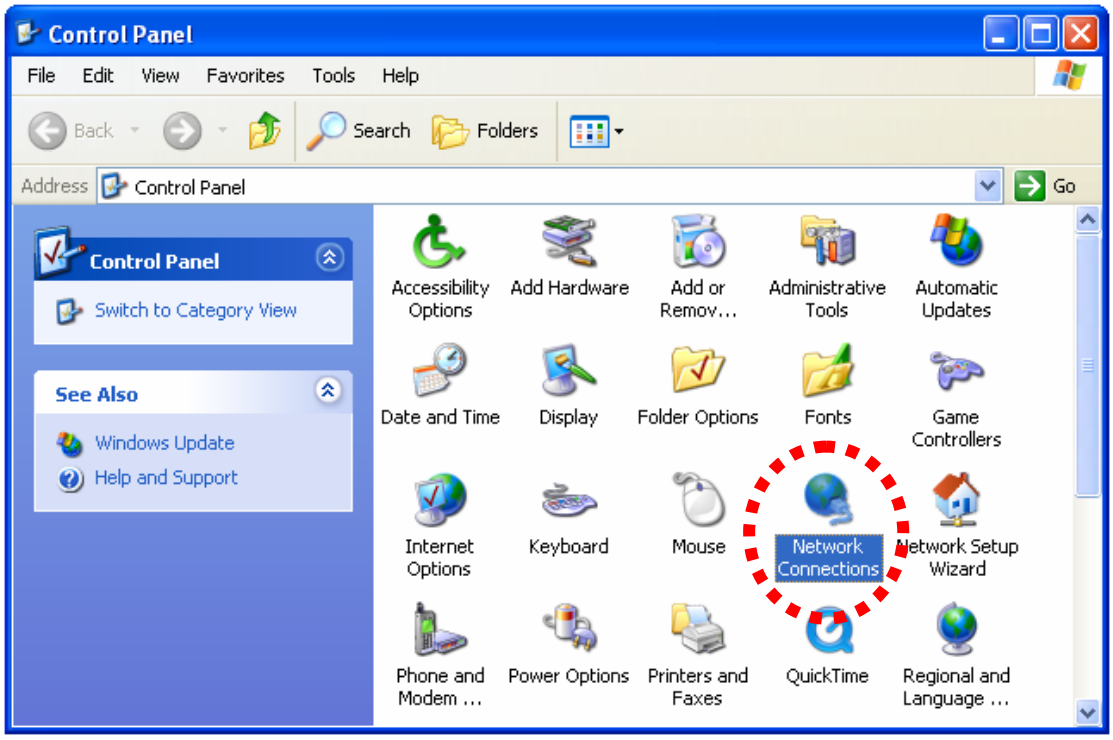
If the left three fields of the IP address of your computer is not 192.168.2, you'll have to change the IP address of your computer first:

1. Click 'Start' -> 'Control Panel'

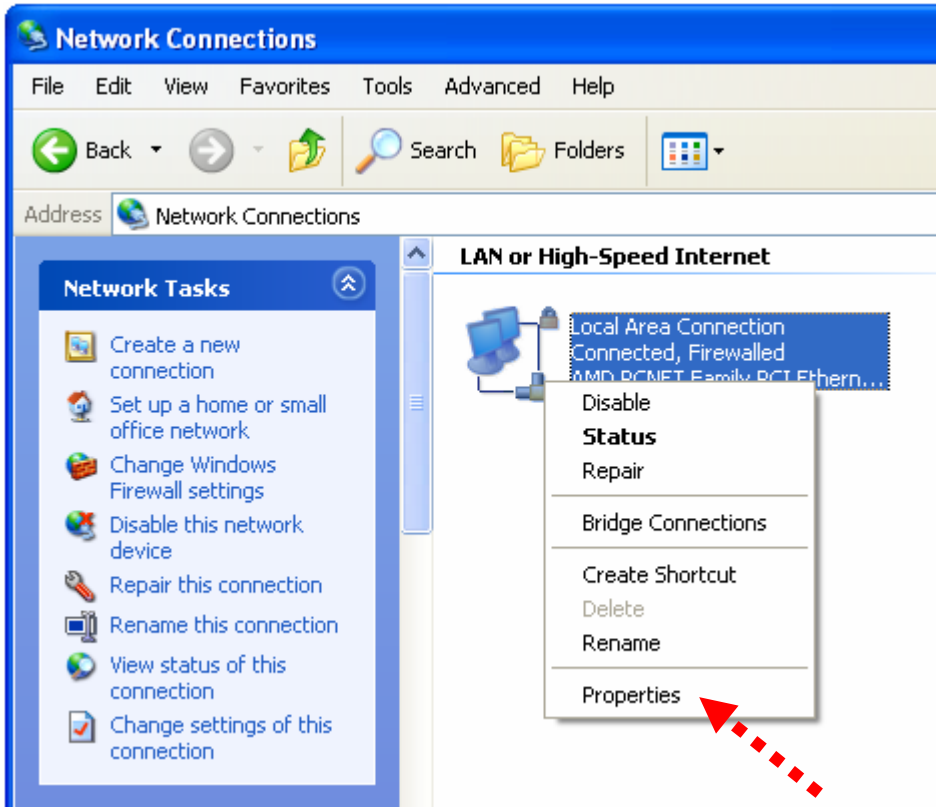


☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

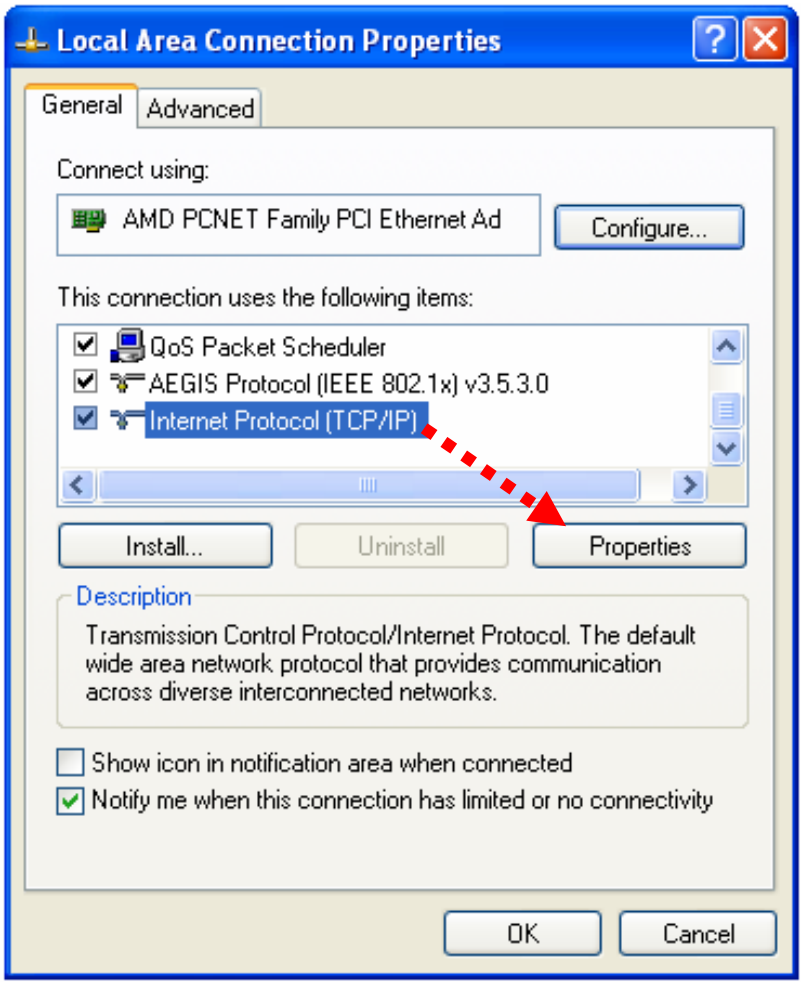
2. Double-click ‘Network Connections’ icon.



3. Right-click ‘Local Area Connection’, and click ‘Properties’.

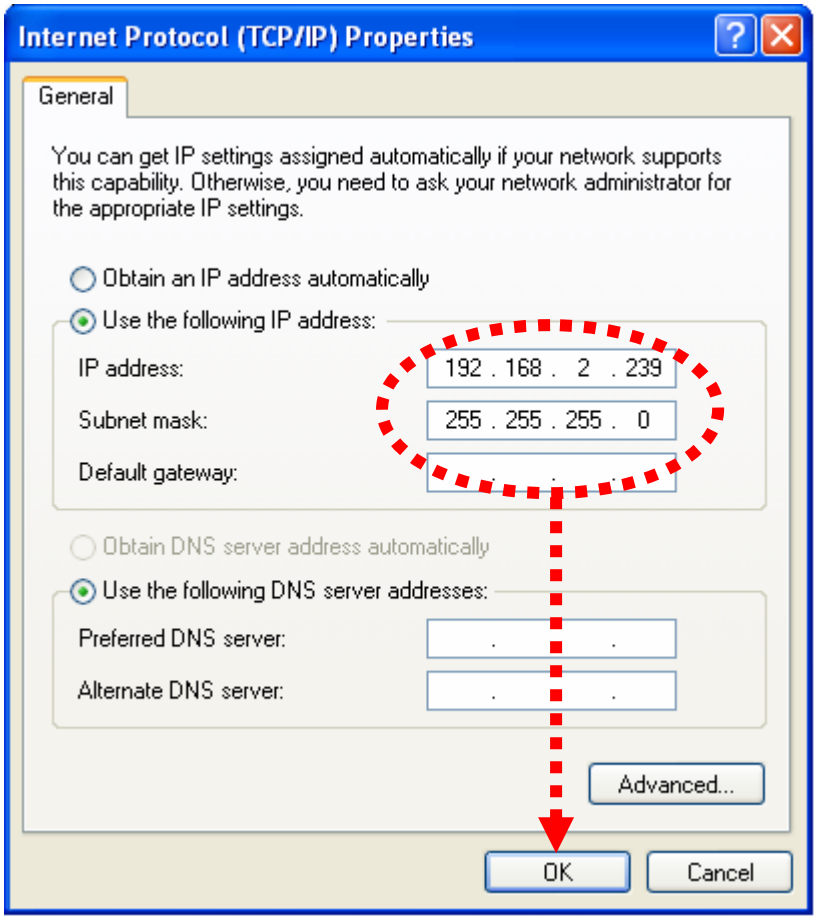


4. Select ‘Internet Protocol (TCP/IP)’, then click ‘Properties’.



☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

5. In ‘IP address’ field, please fill in any IP address that begins with ‘192.168.2’, and ends with a value greater than 2 and less than 254 (You can use the example in the picture ‘192.168.2.239’). In Subnet mask field, please fill ‘255.255.255.0’. Please keep all other fields empty, and click ‘OK’.


Internet Protocol (TCP/IP) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
192 . 168 . 2 . 239
Subnet mask:
255 . 255 . 255 . 0
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

If you changed the IP address of this IP camera and you forgot it, there are 2 methods to recover it:

a. Press and hold the ‘Reset’ button located at the bottom of this IP camera, to clear all settings of the IP camera and reset the IP address back to 192.168.2.3. You’ll lose all settings in the IP camera.
b. Ask the network administrator to check the DHCP release table, if the camera was set to obtain the IP address by DHCP, a new record will be added to the DHCP release table on the DHCP server. (when the IP camera is connected to the local area network)

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

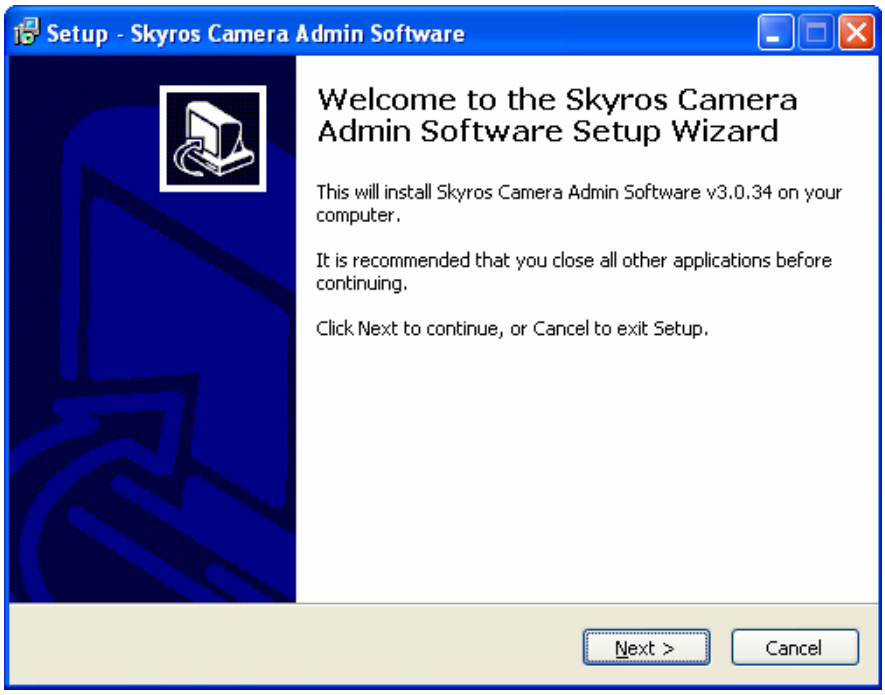
1.7 Using Camera Admin Software to Locate Camera

If you can't connect to the camera by the instructions given in last chapter, you can use camera admin software to search the camera which is connected to your local area network. The admin software is also capable to locate multiple cameras on your local area network.

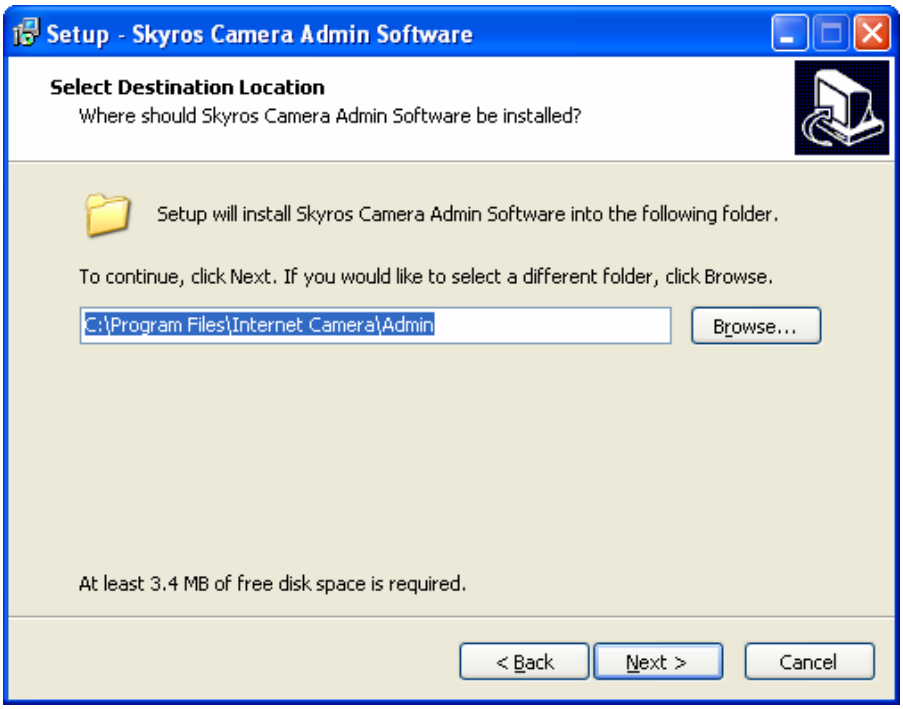
Please insert the Installation Guide CD supplied in the product package, and the CD will automatically run. Click on the 'Install Administrator Utility'.

Then follow the below mentioned instructions to install and use camera admin software:

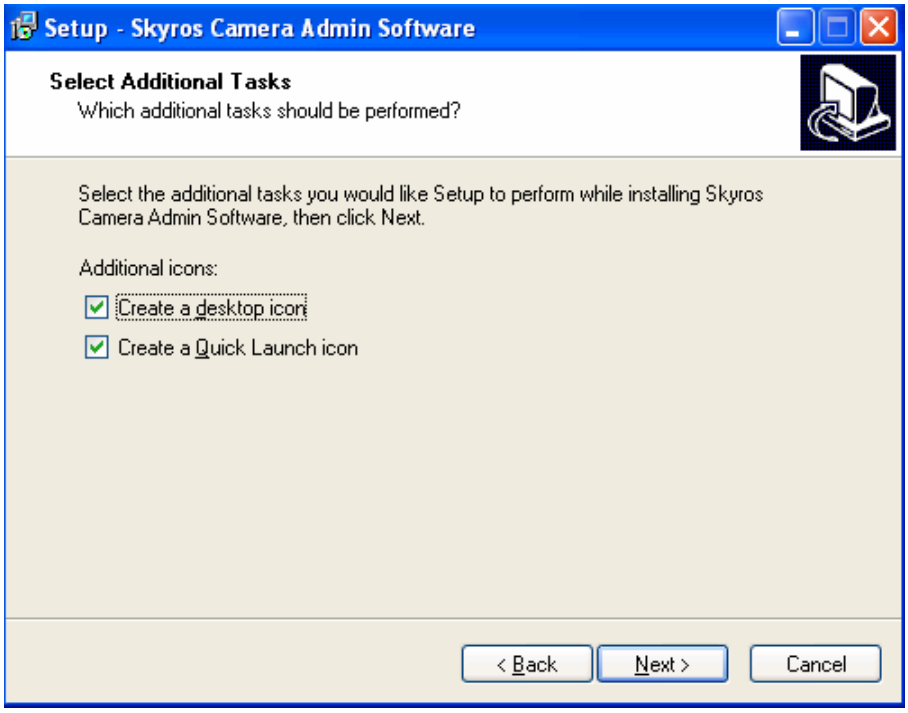
1. Click ‘Next’ to start the installation of SKYROS Camera Admin software:


Setup - Skyros Camera Admin Software
Welcome to the Skyros Camera Admin Software Setup Wizard
This will install Skyros Camera Admin Software v3.0.34 on your computer.
It is recommended that you close all other applications before continuing.
Click Next to continue, or Cancel to exit Setup.
Next >
Cancel

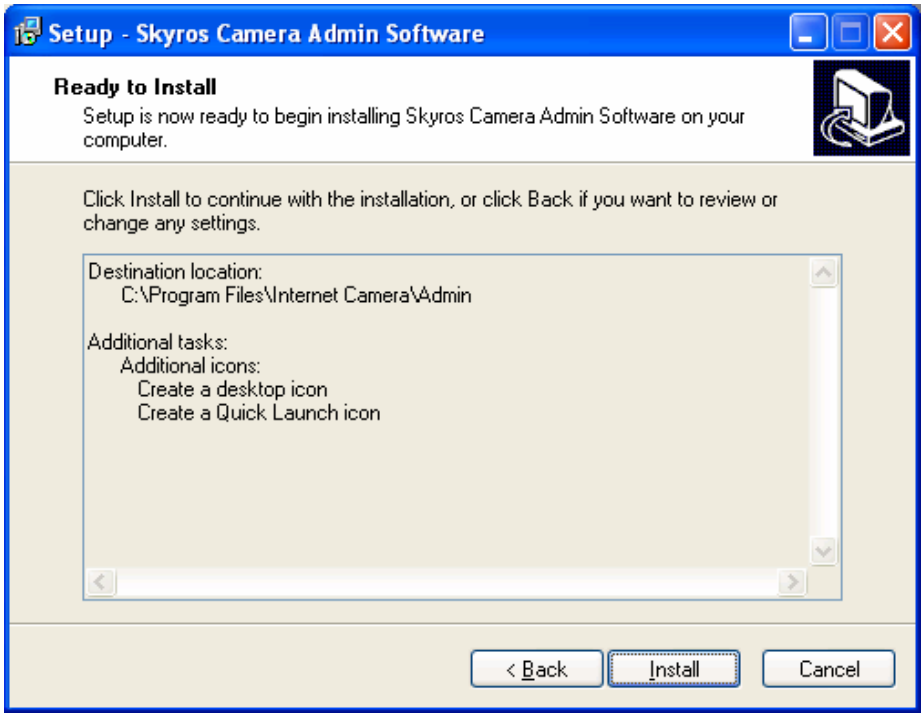
2. You can change the installation folder of camera setup software here, click ‘Browse’ to select an existing folder or you can just click ‘Next’ to use default installation folder:


Setup - Skyros Camera Admin Software
Select Destination Location
Where should Skyros Camera Admin Software be installed?
Setup will install Skyros Camera Admin Software into the following folder.
To continue, click Next. If you would like to select a different folder, click Browse.
C:\Program Files\Internet Camera\Admin
Browse...
At least 3.4 MB of free disk space is required.
< Back
Next >
Cancel

3. If you wish to create desktop icon and / or quick launch icon for camera admin software, please check corresponding box, and click ‘Next’ to continue.

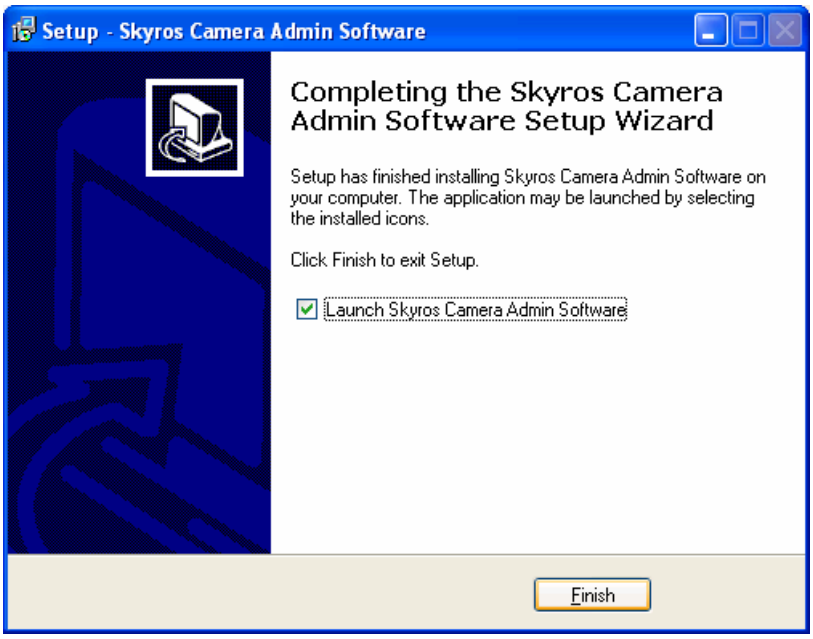

Setup - Skyros Camera Admin Software
Select Additional Tasks
Which additional tasks should be performed?
Select the additional tasks you would like Setup to perform while installing Skyros Camera Admin Software, then click Next.
Additional icons:
Create a desktop icon
Create a Quick Launch icon
< Back
Next >
Cancel

4. You’ll see a brief of all options you selected, click ‘Install’ to install camera admin software now or click ‘back’ to go back to previous steps to change settings.

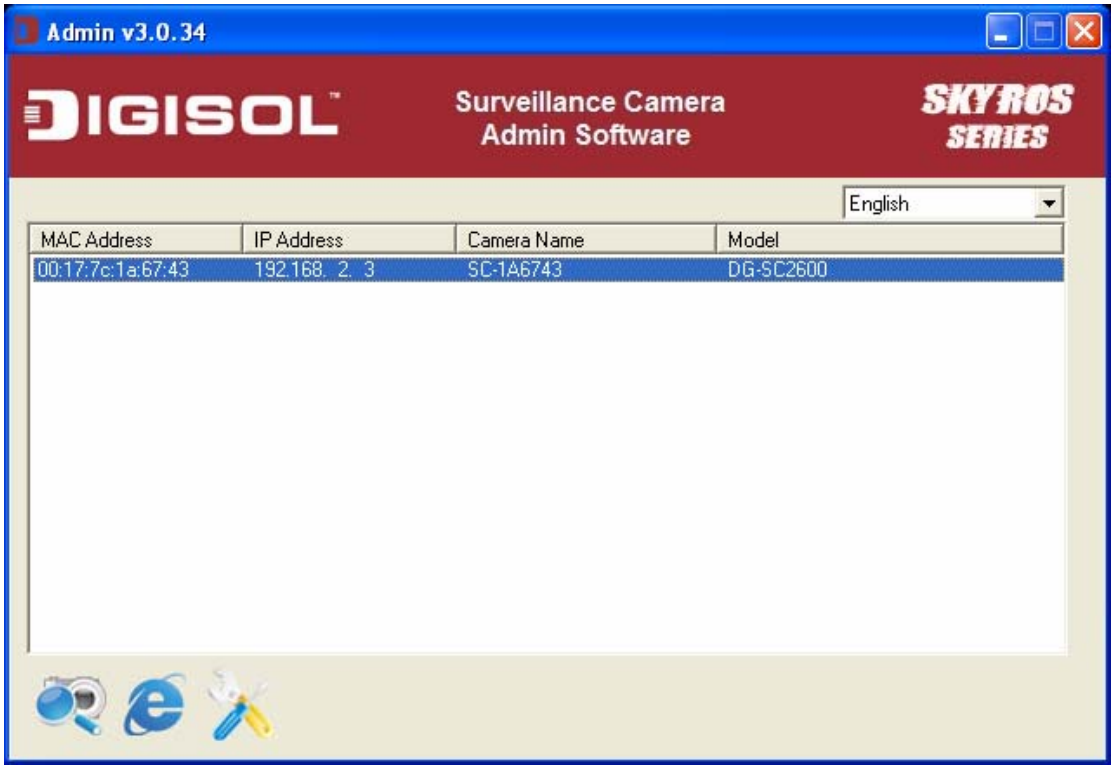

Setup - Skyros Camera Admin Software
Ready to Install
Setup is now ready to begin installing Skyros Camera Admin Software on your computer.
Click Install to continue with the installation, or click Back if you want to review or change any settings.
Destination location:
C:\Program Files\Internet Camera\Admin
Additional tasks:
Additional icons:
Create a desktop icon
Create a Quick Launch icon
< Back
Install
Cancel

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

5. When you see this message, the installation of camera admin software is complete. If you wish to launch camera admin software now, keep 'Launch Skyros Camera Admin Software' box checked, and click 'Finish' to close installation utility.


Setup - Skyros Camera Admin Software
Completing the Skyros Camera Admin Software Setup Wizard
Setup has finished installing Skyros Camera Admin Software on your computer. The application may be launched by selecting the installed icons.
Click Finish to exit Setup.
Launch Skyros Camera Admin Software
Finish

Once the camera admin software is launched, all cameras found on your local area network will be displayed:



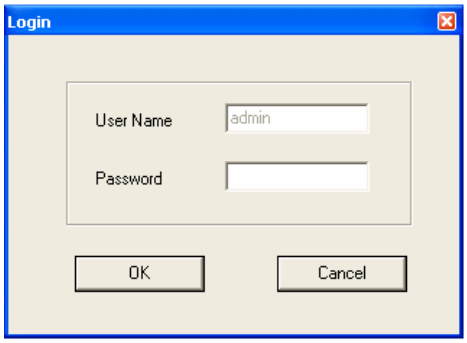
☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

All camera-related information will be displayed here. If you wish to connect to a certain camera by web browser, double-click the camera listed here.

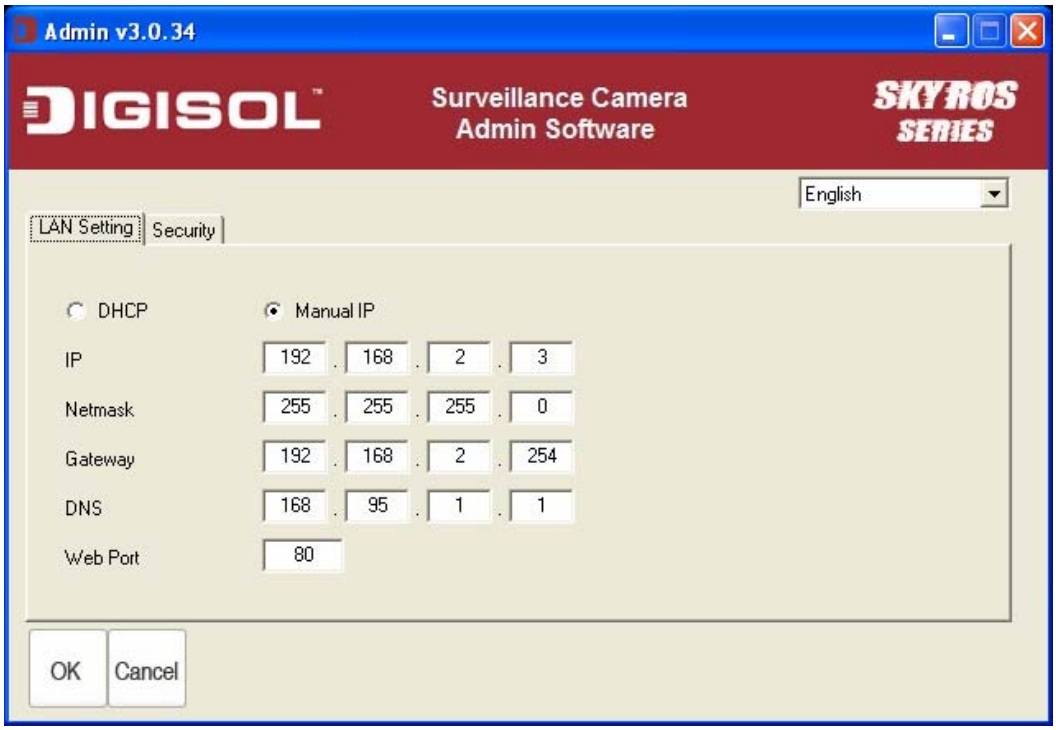
Search camera: Click this button to search all cameras on the local area network again.

Browse camera via web: Select a camera from the displayed list, and then click this button to connect to the camera by web browser.

Configure camera: Click this button to configure camera's network and security setting. You'll be prompted to input camera's password:



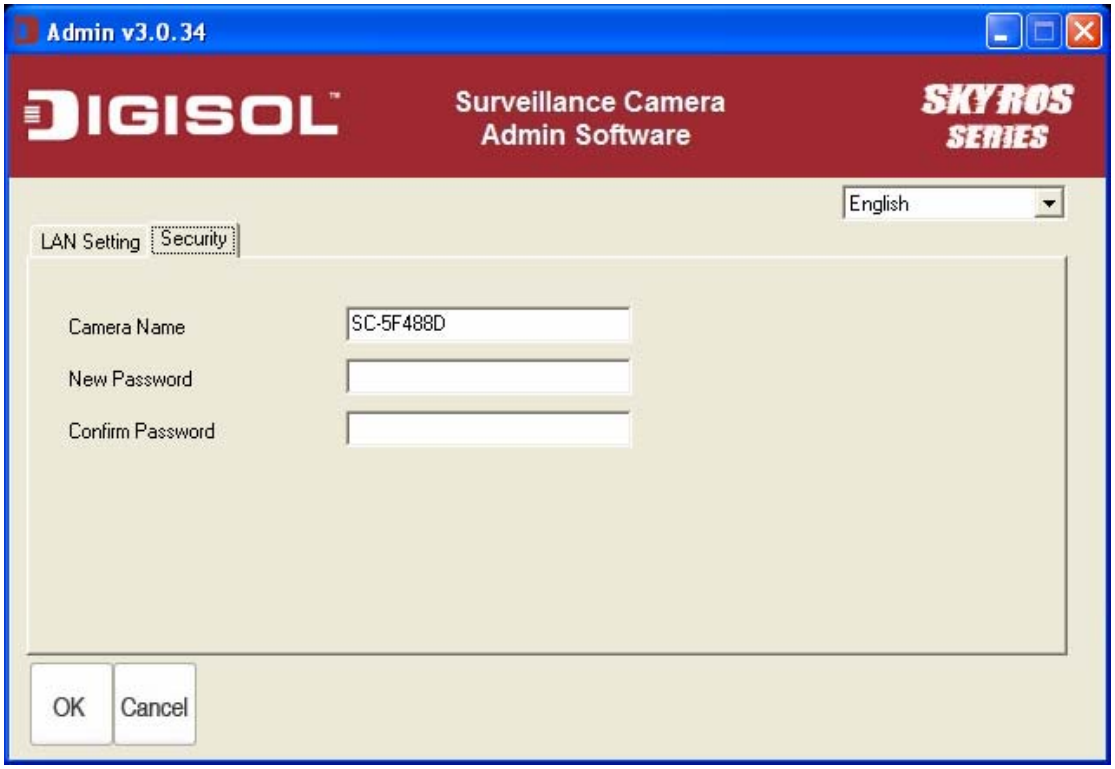
Input the password (default: 1234) and click OK to configure the camera's network and security setting:



☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

In ‘LAN Setting’ page, you can configure camera’s network settings. Select ‘DHCP’ to set the camera to obtain an IP address from the DHCP server on the local area network automatically, and select ‘Manual IP’ to input the IP address information manually. Click ‘OK’ to save settings.

In ‘Security’ page, you can change the camera’s name and password (user name is always ‘admin’ and cannot be changed). You have to input the same password in both ‘New Password’ and ‘Confirm Password’ field, or you’ll be prompted to input new password again. Click ‘OK’ to save settings or click ‘Cancel’ to discard changes.



1.8 Log Onto Web Management Interface

Make sure the IP camera is correctly powered (Power LED is on), and then launch Internet Explorer and type the IP address of the IP camera in the address bar of Internet Explorer. You should be prompted to input the user name and password:

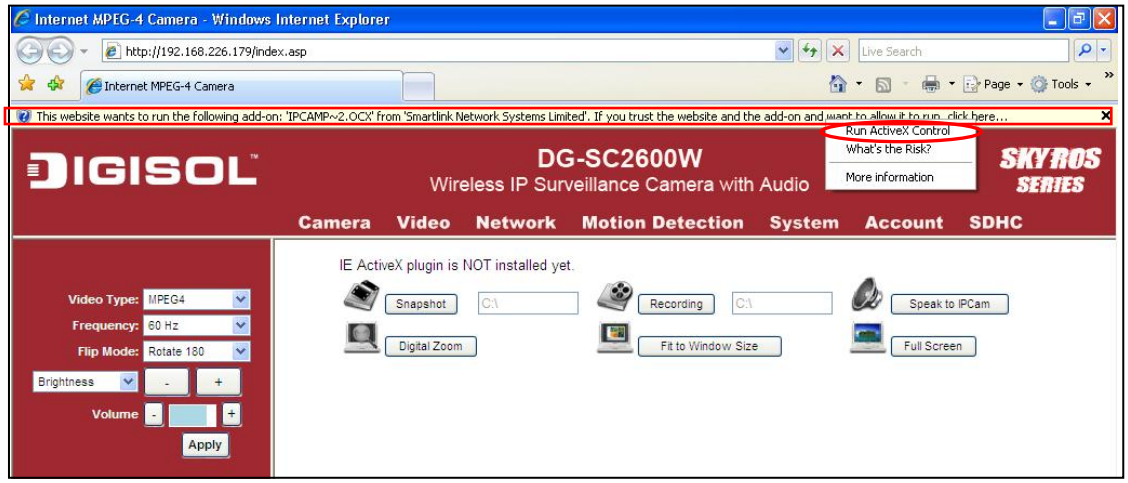
Connect to 192.168.2.3
The server 192.168.2.3 at Internet Camera requires a username and password.
Warning: This server is requesting that your username and password be sent in an insecure manner (basic authentication without a secure connection).
User name:
Password:
Remember my password
OK
Cancel

Default user name is ‘admin’ and password is ‘1234’. Click ‘OK’ to continue.

If you’re rejected, maybe the password has been modified previously. This should not happen if this is a newly-purchased camera. However, if the camera has been used earlier, the password would have been changed. Please try to obtain the correct user name / password, or else reset the camera to default settings.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

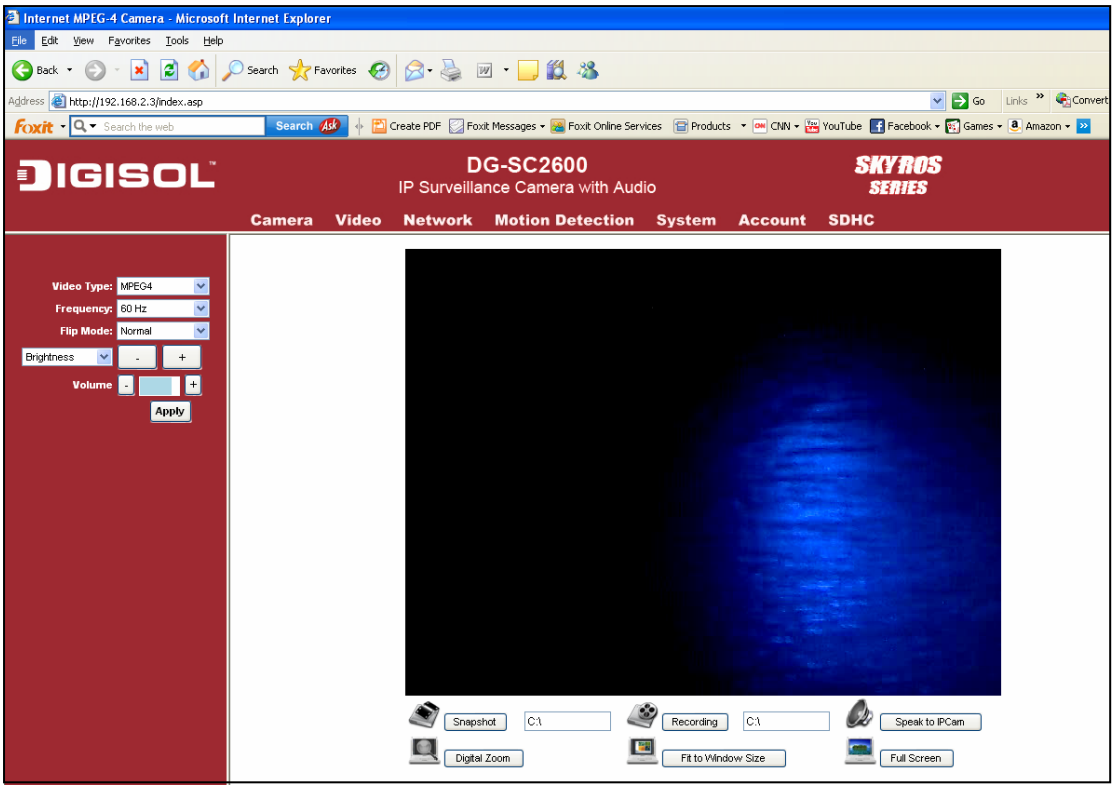
Once logged in, you may see the following messages at the top of Internet Explorer: This IP camera requires a special ActiveX control to work. Please click on the message, and select 'Run ActiveX Control…'


Internet MPEG-4 Camera - Windows Internet Explorer
http://192.168.226.179/index.asp
This website wants to run the following add-on: 'IPCAMP~2.OCX' from 'Smartlink Network Systems Limited'. If you trust the website and the add-on and want to allow it to run, click here...
Run ActiveX Control
What's the Risk?
More information
DG-SC2600W
Wireless IP Surveillance Camera with Audio
SKYROS SERIES
Camera Video Network Motion Detection System Account SDHC
IE ActiveX plugin is NOT installed yet.
Video Type: MPEG4
Frequency: 60 Hz
Flip Mode: Rotate 180
Brightness
Volume
Apply
Snapshot
Recording
Speak to IPCam
Digital Zoom
Fit to Window Size
Full Screen

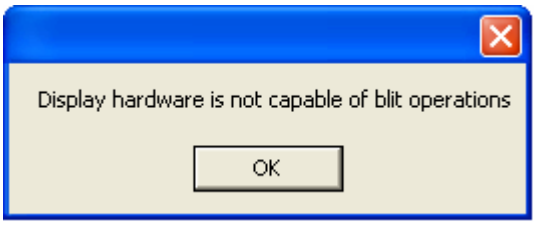
When you're prompted, click 'Run' to continue.

Internet Explorer - Security Warning
Do you want to run this ActiveX control?
Name: IPCAMP~2.OCX
Publisher: Smartlink Network Systems Limited
Run
Don't Run
This ActiveX control was previously added to your computer when you installed another program, or when Windows was installed. You should only run it if you trust the publisher and the website requesting it. What's the risk?

Now you can go back to web browser, and you should be able to see the image captured by the camera (You may need to press F5 or CTRL-R to reload web page).



Note: If you see one of these messages (or both):



OR

Your computer may not have the display capability that this IP camera requires, or you don't have Microsoft DirectX® installed. Please download Microsoft DirectX® from Microsoft's website *(http://www.microsoft.com)*, and try again.

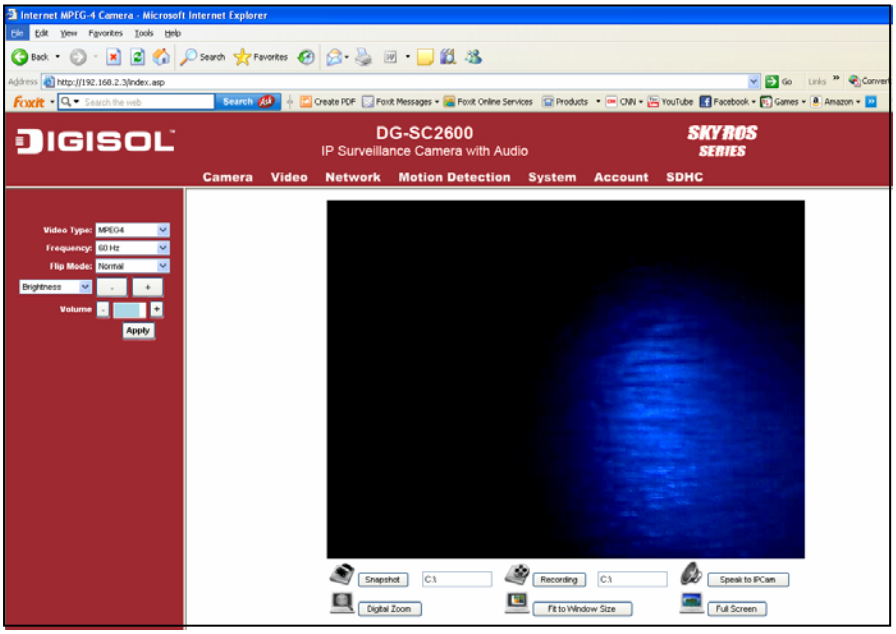
In some cases, your computer is able to display the image from IP camera correctly, but you'll still see these messages. If this happens, just ignore them.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

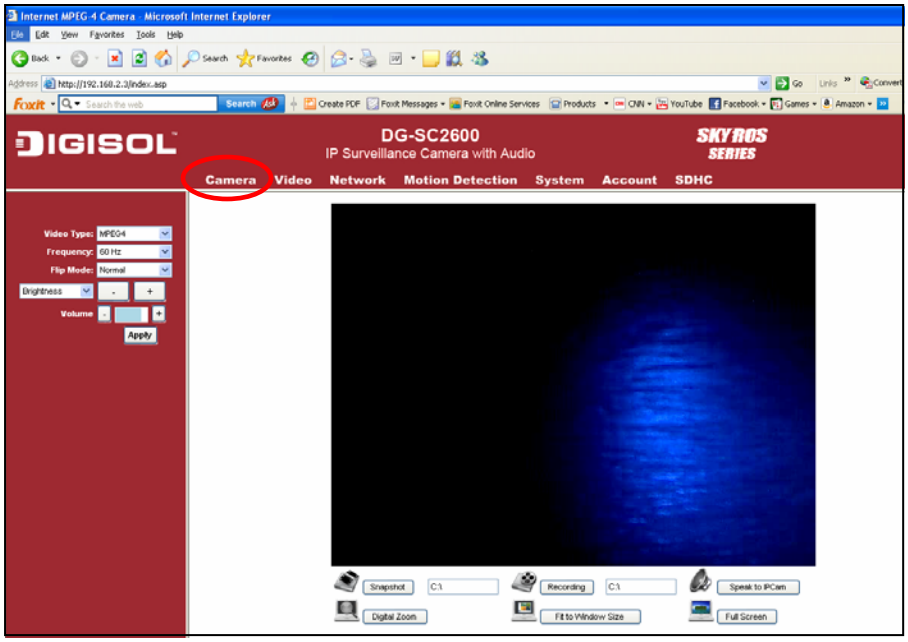
2 Using Web Management Interface

2.1 Camera Settings

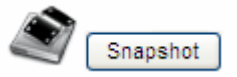
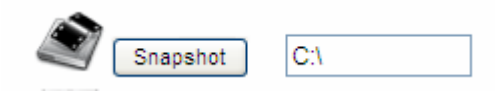
The first menu when you log into web management interface is ‘Camera’, and this is the only menu where you can see the real-time image from camera.



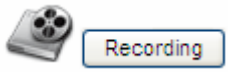
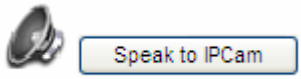
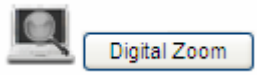
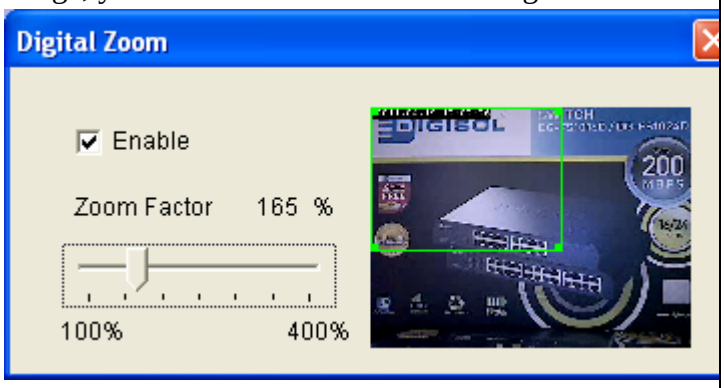
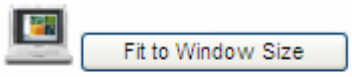
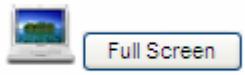
You can always get back to this menu by clicking ‘Camera’ on the top of the web management interface.



The settings in this menu are described below:

Item	Description
Video Type	Specifies video encoding type. Available options are 'MPEG4', 'MJPEG' and 'H.264'. Different encoding types require different bandwidth, and provide different video quality.
Frequency	If the place where this IP camera points to has fluorescent light(s), the image may flicker. In this case, you can adjust this setting to the frequency of electrical power; which can improve the image quality effectively. If you don't know which one you should use, just try any of them and select the one with fewer flickers.
Flip Mode	If the camera is mounted on the ceiling or wall, you can use this function to rotate the displayed image.
Brightness / Saturation / Sharpness	Select brightness, saturation and sharpness from dropdown menu, and click '-' or '+' button to increase or decrease brightness / saturation / sharpness setting value. In certain environment, adjust brightness, saturation, and / or sharpness will help improve video quality.
Volume	Adjust the volume of audio output. Press '+' or '-' button to increase or decrease volume.
NOTE: When you change any setting(s) listed above, please click 'Apply' button so the change(s) will take effect. For following functions, changes will take effect right away.	
Snapshot 	Click 'Snapshot' button to save the displayed image as an image file, a message box will appear after you click 'Snapshot' button, showing the filename and location of saved image file (default filename is current date and time). Default directory used to save image file is 'C:\', you can change the directory by clicking the text input box located at the right of 'Snapshot' button:  and you'll be prompted to select a new directory.
Recording	Press this button to record the displayed image as a video file in AVI format, and you can play the video

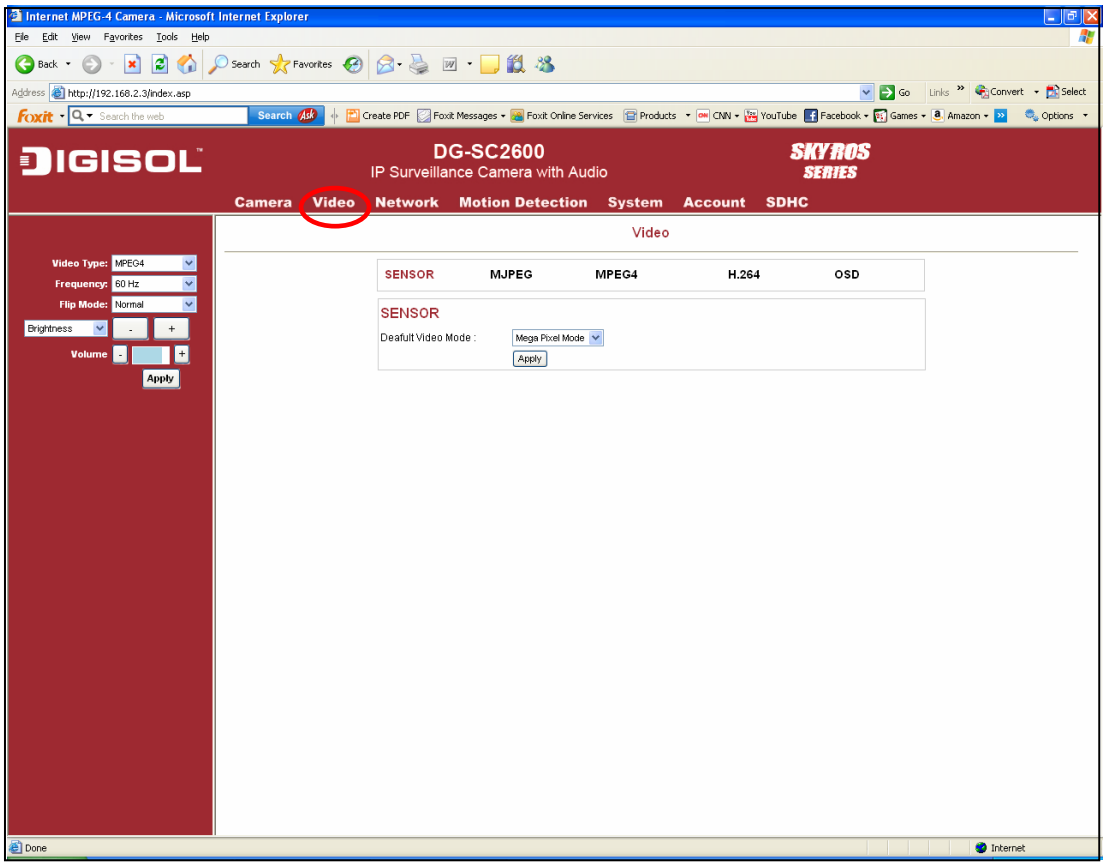
☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

	file back using software like Windows Media Player. To stop recording, press 'Stop Recording' button (the same button). You can also change the directory used to save video file.
Speak to IP Cam 	You can transmit the voice received by your computer's microphone to the camera's external speaker. Press and hold this button, then speak to the microphone. Please note that external speaker must be connected to this camera.
Digital Zoom 	If you wish to enlarge certain portion of the captured image, you can click this button to set digital zoom:  Click 'Enable' to enable digital zoom function, then you can drag the slide bar to adjust zoom ratio. You can also use your mouse to drag the zoom area (the green square) to reposition the zoom area.
Fit to Window Size 	Click this button and the image size will be adjusted to fit the size of browser window.
Full Screen 	Click this button to display the image in full-screen mode (uses all available space to display the image captured by this camera).

Note: If you're not using Microsoft Internet Explorer as web browser, some functionalities may not work properly.

2.2 Video

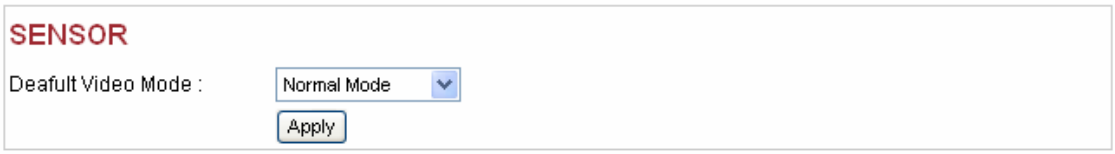
You can change video-related settings of this IP camera in ‘Video’ menu. You can access this menu by clicking ‘Video’ on the top of web management interface.



There are 4 types of video settings for this IP camera. To set the option of a certain video setting, move the mouse cursor on it and its options will appear.

2.2.1 Sensor

Under this tab, you can set the Normal / Mega pixel Mode on an IP camera. Depending on the Image quality requirement, you can configure the Sensor tab settings.



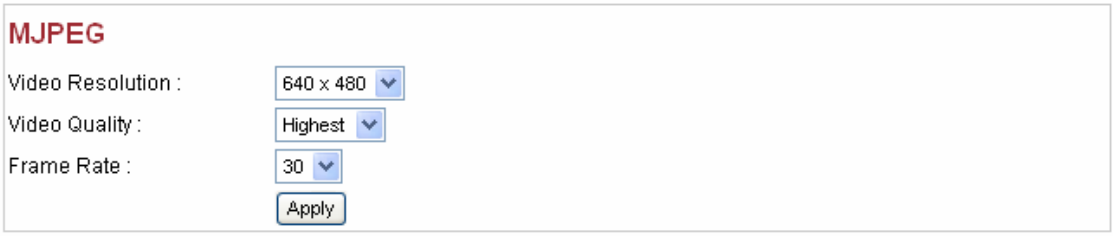
Normal Mode: Option to set the lower resolutions on an IP camera with maximum 30fps. If you select this mode, only VGA (640 x 480) & QVGA (320 x 240) resolution @30fps max will be available.

Mega pixel Mode: Option to set the highest resolution on an IP camera with maximum 15fps. If you select this mode, all the three resolutions, SXGA (1280 x 1024)/ XGA (1024 x 768) @ 15fps max; VGA (640 x 480) & QVGA (320 x 240) @30fps max will be available.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

2.2.2 MJPEG

You can adjust video settings when you select ‘MJPEG’ as video type in ‘Video’ menu.



The settings in this menu are described below:

Item	Description
Video Resolution	Changes the resolution of video. Available options are 1280 x 1024, 640 x 480 and 320 x 240. Higher resolution provides better video quality and more detail, but requires more network bandwidth.
Video Quality	Changes video quality. There are 5 levels of video quality from ‘Lowest’ to ‘Highest’. Selecting a higher video quality will provide better video quality, but requires more network bandwidth.
Frame Rate	Changes video frame rate. Depending on the Video Resolution, the options available range from ‘30’ to ‘1’ indicates how many video frames this camera will transmit every second. Higher frame rate provides smooth video watching experience and will not lose details of video, but requires more network bandwidth. If you’re using this video camera with insufficient network bandwidth, selecting a lower frame rate setting will help.

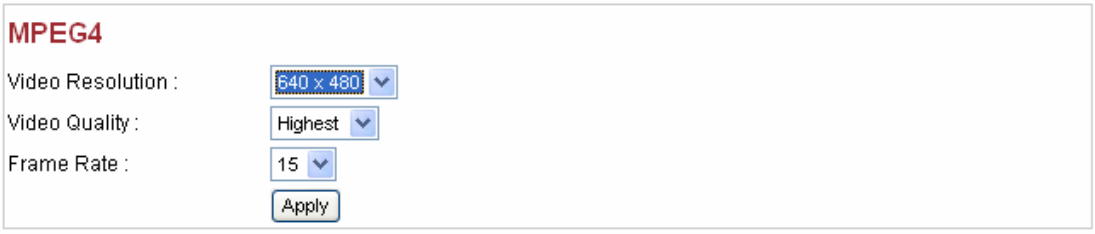
Click ‘Apply’ for settings to take effect.

Note: The highest video resolutions are visible when mega pixel mode in sensor video type is enabled. This is valid for MJPEG, MPEG4 and H.264 video types.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

2.2.3 MPEG4

You can adjust video settings when you select ‘MPEG4’ as video type in ‘Video’ menu.



The settings in this menu are described below:

Item	Description
Video Resolution	Changes the resolution of video. Available options are 1024 x 768, 640 x 480 and 320 x 240. Higher resolution provides better video quality and more detail, but requires more network bandwidth.
Video Quality	Changes video quality. There are 5 levels of video quality from ‘Lowest’ to ‘Highest’. Selecting a higher video quality will provide better video quality, but requires more network bandwidth.
Frame Rate	Changes video frame rate. Available options from ‘30’ to ‘1’, indicates how many video frames this camera will transmit every second. Higher frame rate provides smooth video watching experience and will not lose details of video, but requires more network bandwidth. If you’re using this video camera with insufficient network bandwidth, selecting a lower frame rate setting will help.

Click ‘Apply’ for settings to take effect.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

2.2.4 H.264

You can adjust video settings when you select ‘H.264’ as video type in ‘Video’ menu.

The settings in this menu are described below:

Item	Description
Video Resolution	Changes the resolution of video. Available options are 1280 x 1024, 640 x 480 and 320 x 240. Higher resolution provides better video quality and more detail, but requires more network bandwidth.
Video Quality	Changes video quality. There are 5 levels of video quality from ‘Lowest’ to ‘Highest’. Selecting a higher video quality will provide better video quality, but requires more network bandwidth.
Frame Rate	Changes video frame rate. Available options from ‘30’ to ‘1’, indicates how many video frames this camera will transmit every second. Higher frame rate provides smooth video watching experience and there will be no loss of video details, but requires more network bandwidth. If you’re using this video camera with insufficient network bandwidth, selecting a lower frame rate setting will help.

Click ‘Apply’ for settings to take effect.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

2.2.5 OSD

If you need to display information about this camera, like camera's name or current date / time, you can use OSD (On-Screen Display) menu.

The settings in this menu are described below:

Item	Description
On-Screen Display	Select 'Enable' to enable on-screen display function (information about this camera will be displayed on camera's display image), and select 'Disable' to disable it.
Show Camera Name	Select 'Enable' to show camera's name on camera's display image, select 'Disable' to hide it.
Show Date	Select 'Enable' to show current date on camera's display image, select 'Disable' to hide it.
Show Time	Select 'Enable' to show current time on camera's display image, select 'Disable' to hide it.

Click 'Apply' for settings to take effect.

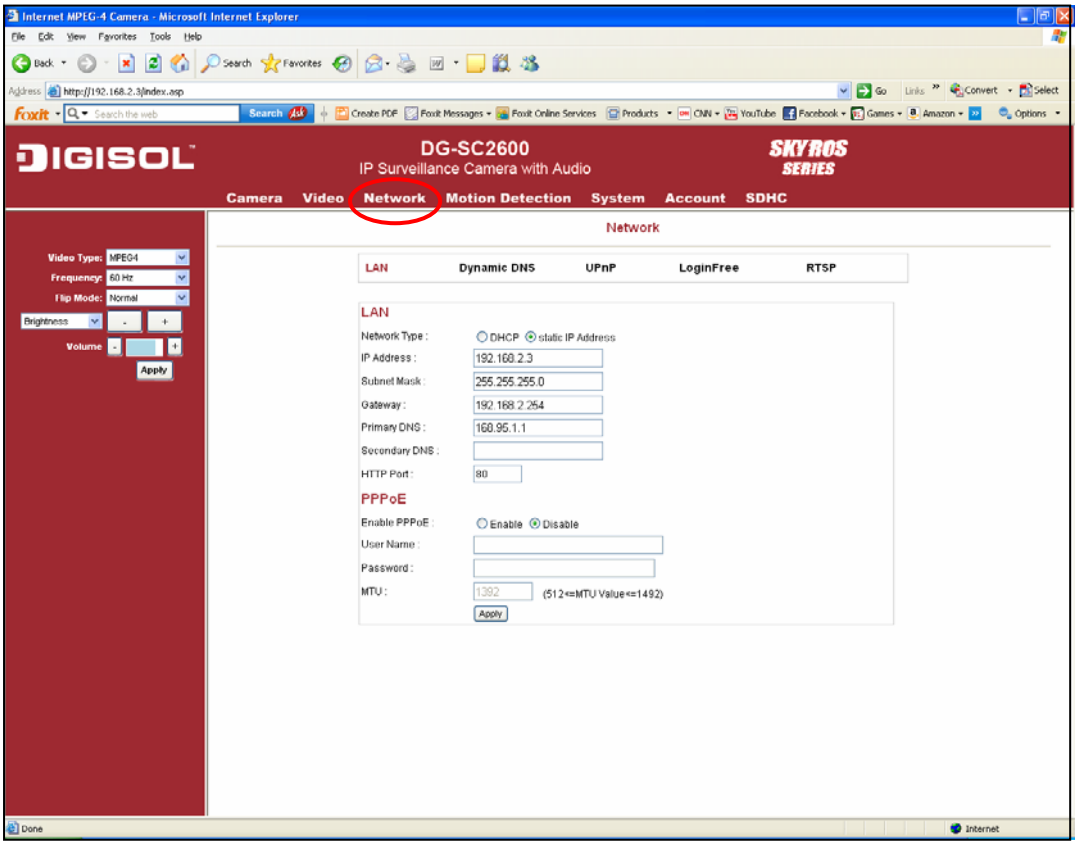
When OSD is enabled, selected OSD items will be displayed as shown below:

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

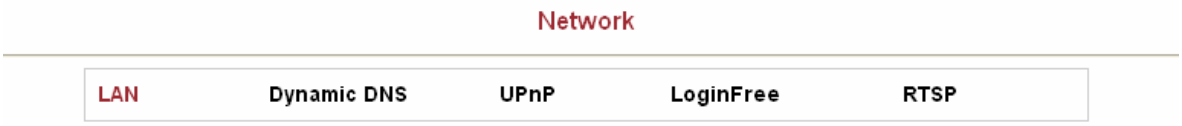
2.3 Network Settings

All network-related settings can be found in this menu, and you have to specify TCP/IP parameters in this menu if you want to change the IP address, use PPPoE, Dynamic DNS, enable RTSP, configure Loginfree and activate UPnP function.

You can access this menu by clicking 'Network' on the top of web management interface.

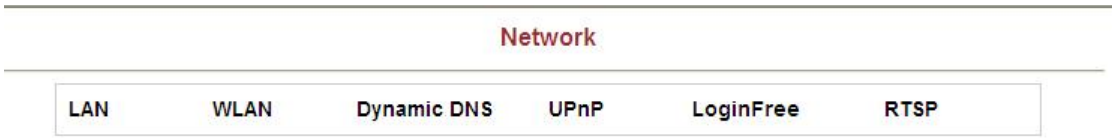


After you selected 'Network', network setting menu will appear. There are 5 sub-menus for Wired model (DG-SC2600) as shown below:



1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

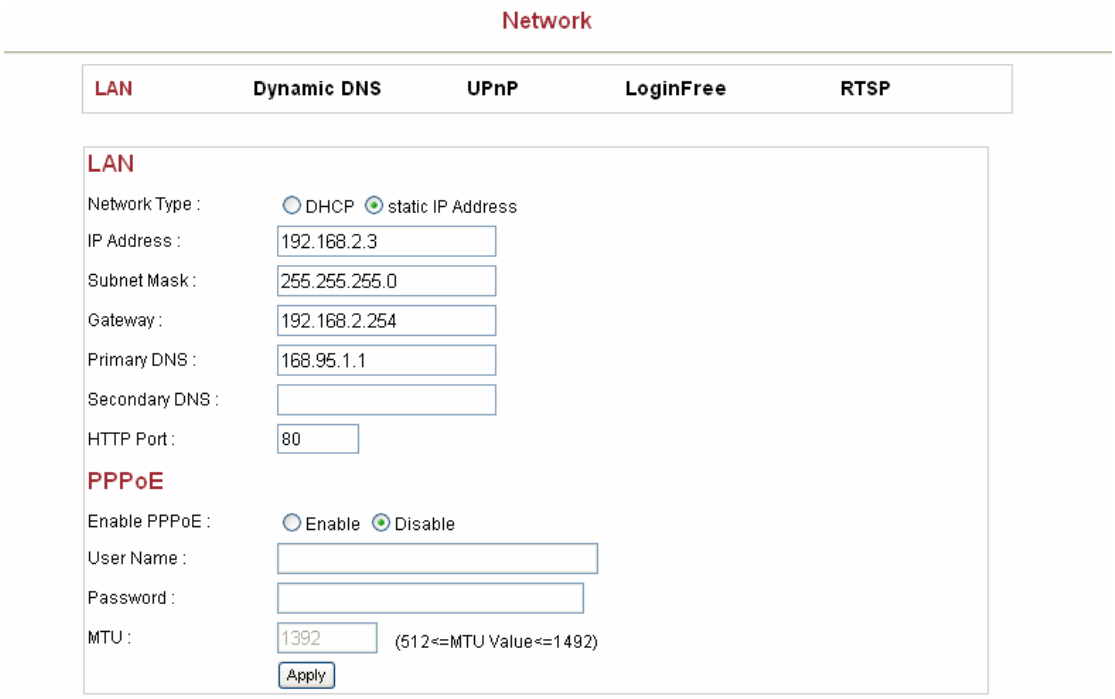
Similarly, for Wireless model (DG-SC2600W) 6 sub-menus will be displayed as shown below.



Please click the network setting you wish to set, and then refer to the instructions given below.

2.3.1 LAN

You can define IP address and select the port number you wish to use here.



The description of every setting in this menu will be given below:

Item	Description
Network Type	This camera can obtain the IP address from DHCP server automatically (if you have one), or set a fixed IP address. Select 'DHCP' to obtain IP address automatically or 'Static IP Address' to assign this IP camera with a fixed IP address. When 'DHCP' is selected, IP address parameters below will be grayed out.
IP Address	Specify the IP address for this IP camera here.

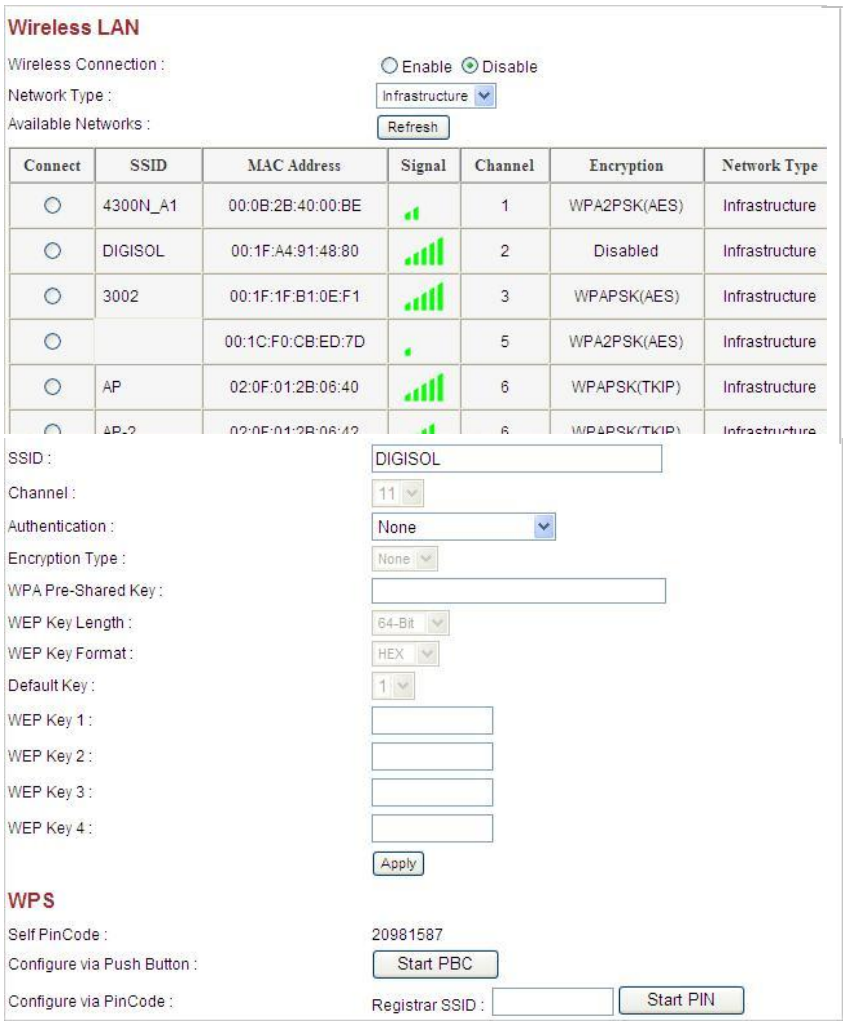
☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

Subnet Mask	Specify the subnet mask for this IP camera here.
Gateway	Specify the gateway address of the local network here.
Primary DNS	Specify the IP address of DNS server here. Please input IP address only. If you don't know the address of DNS server, ask the network administrator or your ISP for help.
Secondary DNS	Specify the IP address of backup DNS server here. When primary DNS is unreachable, IP camera will use the IP address specified here as DNS server. This field is optional.
Web Port	Specify the port number of web management interface here. If it's not 80, you'll have to add ': port' after the IP address / hostname of this IP camera. For example, if the HTTP port number you specified here is 90 and the IP address of IP camera is 10.20.20.30, then you have to input 'http://10.20.20.30:90' in the address bar of Internet explorer.
Enable PPPoE	Select 'Enable' to activate PPPoE function of this IP camera, select 'Disable' to disable it.
User Name	Input the PPPoE username assigned by your ISP here.
Password	Input the PPPoE password assigned by your ISP here.
MTU	Input the MTU (Maximum Transmission Unit) given by your ISP here. Ask your ISP if you don't know what value you should input here. Default value '1392' should work with most of ISPs and will give you a nice network performance.

Click 'Apply' to save settings and make the new settings take effect.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

2.3.2 WLAN (Wireless Model)


Wireless LAN
Wireless Connection : Enable Disable
Network Type : Infrastructure
Available Networks : Refresh
Connect SSID MAC Address Signal Channel Encryption Network Type
4300N_A1 00:0B:2B:40:00:BE 1 WPA2PSK(AES) Infrastructure
DIGISOL 00:1F:A4:91:48:80 2 Disabled Infrastructure
3002 00:1F:1F:B1:0E:F1 3 WPAPSK(AES) Infrastructure
00:1C:F0:CB:ED:7D 5 WPA2PSK(AES) Infrastructure
AP 02:0F:01:2B:06:40 6 WPAPSK(TKIP) Infrastructure
SSID : DIGISOL
Channel : 11
Authentication : None
Encryption Type : None
WPA Pre-Shared Key :
WEP Key Length : 64-Bit
WEP Key Format : HEX
Default Key : 1
WEP Key 1 :
WEP Key 2 :
WEP Key 3 :
WEP Key 4 :
Apply
WPS
Self PinCode : 20981587
Configure via Push Button : Start PBC
Configure via PinCode : Registrar SSID : Start PIN

The settings in this menu are described below:

Item	Description
Wireless Connection	Select ‘Enable’ to activate wireless network function of this IP camera, select ‘Disable’ to disable it.
Network Type	Select the network type of wireless connection. Available options are ‘Infrastructure’ (Connect the IP camera to a wireless access point), and ‘Adhoc’ (This IP camera will become a stand-alone wireless network point, other wireless computers / devices can discover this IP camera and connect to it without wireless access point). You can set to ‘Adhoc’ when you don’t have any wireless

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

	access point, but your computer has wireless network card. Set to 'Infrastructure' when you have wireless access point, and you have computers with wired/wireless network connection.
Available Networks	Here shows all wireless access points found by this IP camera. Please note not all access points will be displayed at the same time, if the access point you expected to connect does not appear, you may have to click 'Refresh' button for several times until it appears. The descriptions of all fields is listed below: Connect: You can select the wireless access point you wish to connect here. SSID: the SSID of all found wireless access points will be shown here. Some wireless access points may hide their SSID; in this case, you have to identify them by their MAC address. MAC Address: If there are many wireless access points in proximity or if some wireless access point hides its SSID, you can use MAC address to distinguish them. Signal: Shows the radio signal strength in percent. Channel: Shows the radio channel of this wireless access point. Encryption: Shows the encryption type used by this wireless access point. You must use the same encryption type if you wish to connect to a certain wireless access point. If the wireless access point does not use encryption, 'Disabled' will be displayed here. Network Type: Shows the network type of a certain wireless access point (Infrastructure or Adhoc).
SSID	Input the SSID of the wireless access point you wish to connect. It should be less than 32 alphanumerical characters. When you select a wireless access point above, its SSID will be filled in this field automatically. However, if the SSID is not displayed (the wireless access point you selected chooses to hide its SSID), you have to know its SSID and input it here, or you will not be able to connect to it.
Channel	Select the radio channel you wish to use here. When network

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

	type is 'Infrastructure', the radio channel is auto-selected according to the channel that wireless access point uses. You can only select the channel number when network type is 'Adhoc'.
Authentication	Here you can select the authentication type of your wireless network. None: When no authentication is required by your wireless network then select "None". Open System: Open system authentication type does not provide authentication. It provides identification using the IP Camera MAC address. Shared Key System: Shared Key System authentication type is a process in which IP Camera can gain access to a wireless network by using Wired Equivalent Privacy (WEP) protocol. WPA-PSK: WPA-PSK is an authentication mechanism in which users need to enter a key for accessing a wireless network. WPA2-PSK: This mode is designed for home and small office networks that don't require the complexity of an 802.1X authentication server. Each wireless network device encrypts the network traffic using a 256 bit key.
Encryption type	WEP: When WEP is selected then you need to enter either Hex or ASCII characters as a wireless key. TKIP: It is a wireless encryption algorithm used with WEP, WPA/PSK. AES: It is a wireless encryption algorithm used with WPA/WPA2.
WEP Key (1-4)	Input the encryption key of selected wireless access point here. This is required when an access point you wish to connect uses encryption.
Self Pin Code	This is the WPS pin code used to connect to WPS-enabled wireless access points. You have to input this number into the WPS enabled access point to establish WPS connection.
Configure via Push Button	Click this button and this camera will enter PBC-style WPS connection state for 120 seconds. Please push 'Start PBC' button on the wireless access point you wish to connect within

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

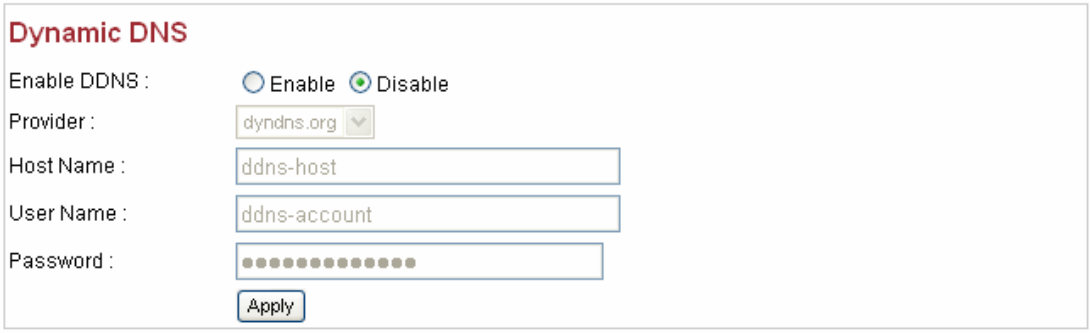
	120 seconds to establish WPS connection (The remaining time will be displayed on the button). If connection cannot be established after 120 seconds, you'll be prompted by a message box, and you can press 'Start PBC' button to try again.
Configure via Pin Code	If you have wireless access point's WPS PIN code, you can input it here and press 'Start PIN' button to start to establish PIN-style WPS connection.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

2.3.3 Dynamic DNS

If your ISP does not give you a fixed Internet IP address (i.e. the Internet address you're using when you access the Internet is not always the same – ask your ISP for detailed information), you can use this function to help you locate the IP address of this IP camera when you're away from home or office.

Before you can use this function, you'll need to apply for an account at no-ip.com (http://www.no-ip.com). Detailed instructions of how to apply a new account can be found on no-ip.com's website. (Refer section 4 to obtain a free no-ip account).



The settings in this menu are described below:

Item	Description
Enable DDNS	Select 'Enable' to activate Dynamic DNS function of this IP camera, select 'Disable' to disable it.
Provider	Select dynamic DNS service provider here.
Host Name	Input dynamic DNS host name here.
User Name	Input dynamic DNS user name here, must be the same as the one you applied on no-ip.com.
Password	Input dynamic DNS password here, must be the same as the one you applied on no-ip.com.

Click 'Apply' to save settings and make the new settings take effect.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

2.3.4 UPnP

When UPnP function is activated, all UPnP-compatible computers / network devices will be able to discover this IP camera automatically (only those in the same local network).

This function is useful and you don't have to remember the IP address of this IP camera. Simply open 'Network neighbor' and the icons for the IP Cameras can be seen.

The settings in this menu are described below:

Item	Description
Enable UPnP	Select 'Enable' to activate UPnP function of this IP camera, select 'Disable' to disable it.

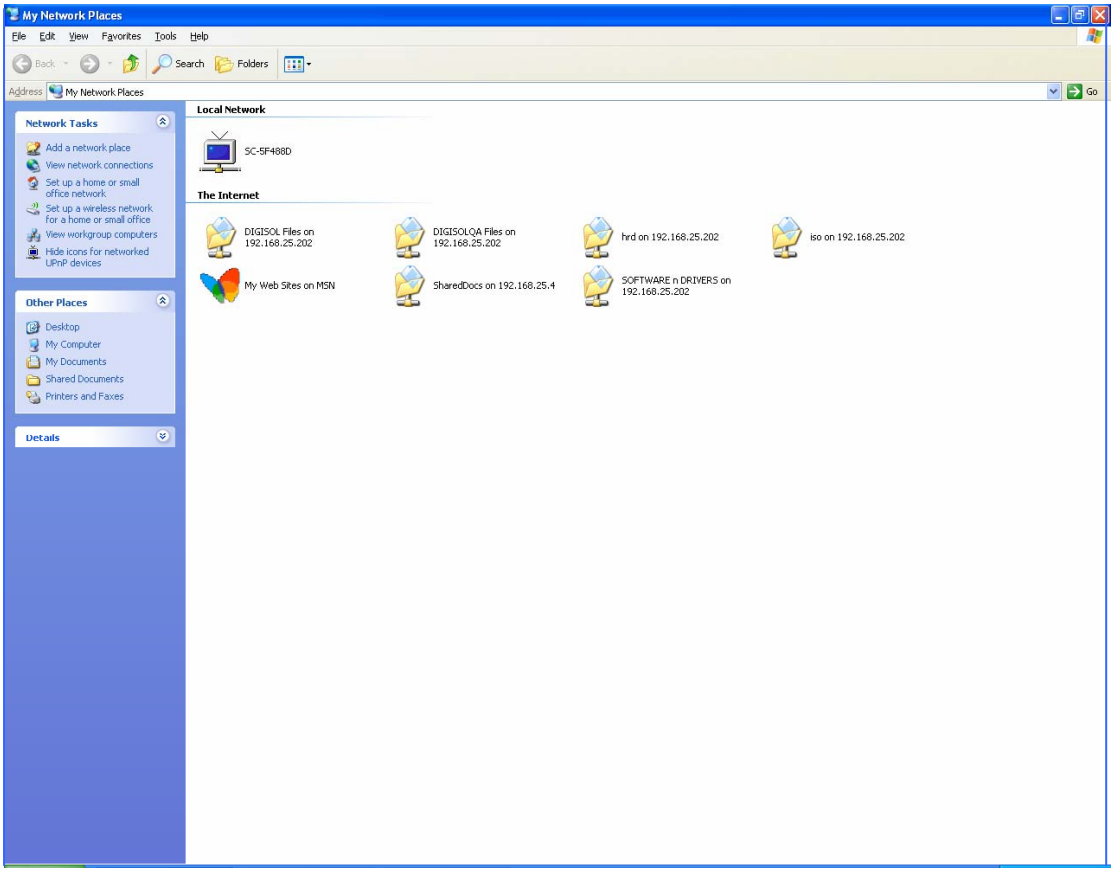
Click 'Apply' to save settings and make the new settings take effect.

After UPnP function is activated, a popup message will appear in the system tray of the UPnP enabled computer.

Click the message to open 'My Network Places', and you'll see the IP camera:

You can double-click the icon to launch Internet Explorer and log onto IP camera's web management interface directly.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com


My Network Places
File Edit View Favorites Tools Help
Back Search Folders
Address My Network Places
Go
Network Tasks
Add a network place
View network connections
Set up a home or small office network
Set up a wireless network for a home or small office
View workgroup computers
Hide icons for networked UPnP devices
Other Places
Desktop
My Computer
My Documents
Shared Documents
Printers and Faxes
Details
Local Network
SC-5F488D
The Internet
DIGISOL Files on 192.168.25.202
DIGISOLQA Files on 192.168.25.202
hrd on 192.168.25.202
iso on 192.168.25.202
My Web Sites on MSN
SharedDocs on 192.168.25.4
SOFTWARE n DRIVERS on 192.168.25.202

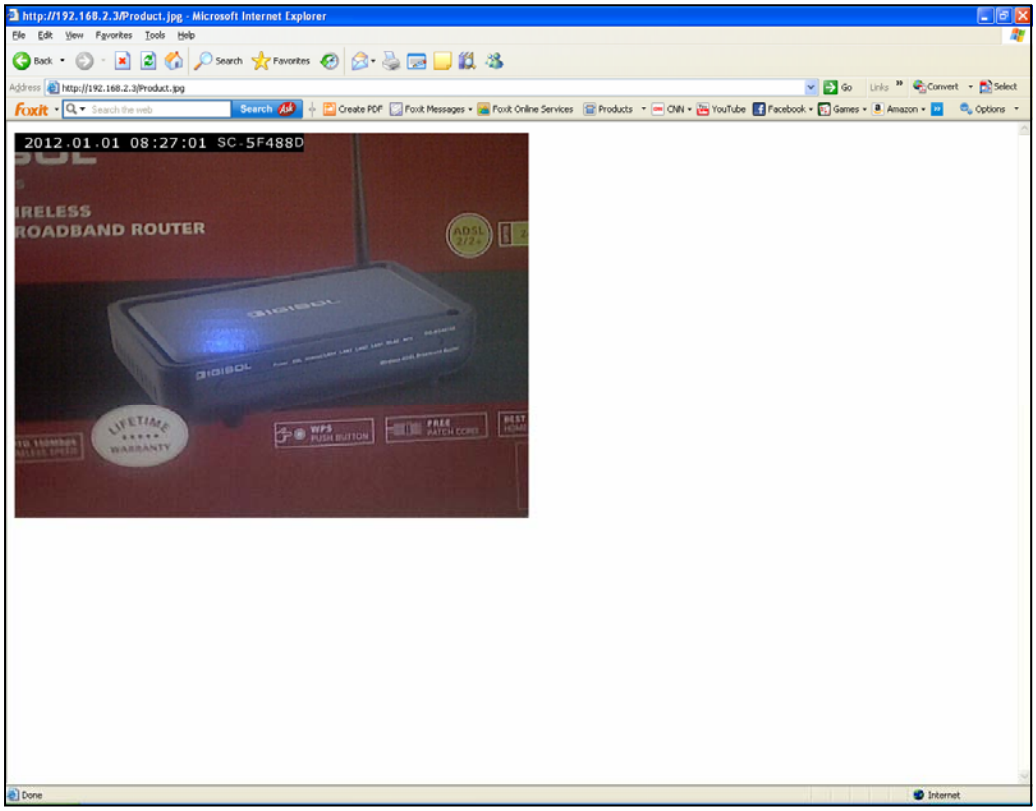
2.3.5 LoginFree

This camera provides a method to let every user to view the image captured by this camera, which is called as ‘LoginFree’. When you wish to let everyone to view the image captured by this camera, or integrate the image with your own web application, you can use this function:

Input the filename here, and click ‘Apply’ to save settings, then other users can access the image by this filename with .jpg extension with the camera’s IP address as prefix. For example, if your camera’s IP address is ‘192.168.2.3’ and the filename you set here is ‘Product’, then everyone on the network can access the image captured by this camera by using the following address:

http://192.168.2.3/Product.jpg

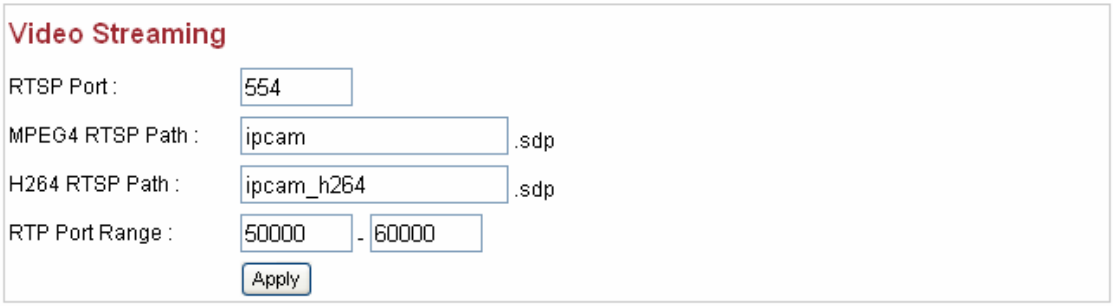
Please note that no authentication will be required to see the captured image. If you wish to disable this function, clear the text in ‘Filename’ field and click ‘Apply.



☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

2.3.6 RTSP

If you want to watch video captured by this IP camera by your own RTSP (Real Time Streaming Protocol) media player, you can use this function to setup RTSP parameters, so your RTSP-compatible player will be able to receive video data.



The settings in this menu are described below:

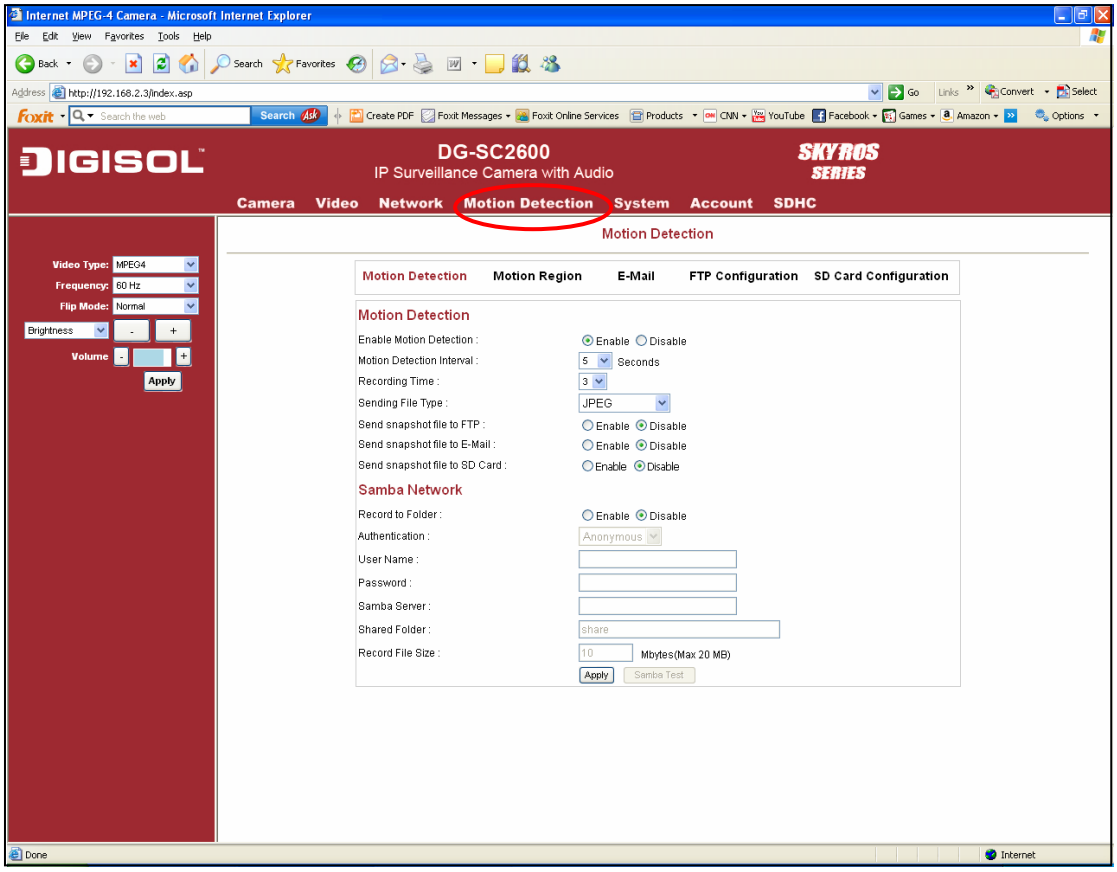
Item	Description
RTSP Port	Input the port number of RTSP here. Default setting is 554.
MPEG4 RTSP Path	Input the path of MPEG4 RTSP video file. When you use RTSP-compatible media player to play RTSP stream, please remember to add '.sdp' file extension.
H.264 RTSP Path	Input the path of H.264 RTSP video file. When you use RTSP-compatible media player to play RTSP stream, please remember to add '.sdp' file extension.
RTP port range	Input the range of RTP port here. Default setting is 50000 to 60000.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

2.4 Motion Detection

When you wish to use this camera to monitor the activities, motion detection function will be very useful. When Motion Detection is used, continuous manual monitoring of the images from the camera is not required. The camera can detect motions and automatically send intimations. Once motion is detected, a captured image can be sent to you by Email or via FTP or stored in local SD card.

To use motion detection, click the Motion Detection link on the top of the menu as shown below.

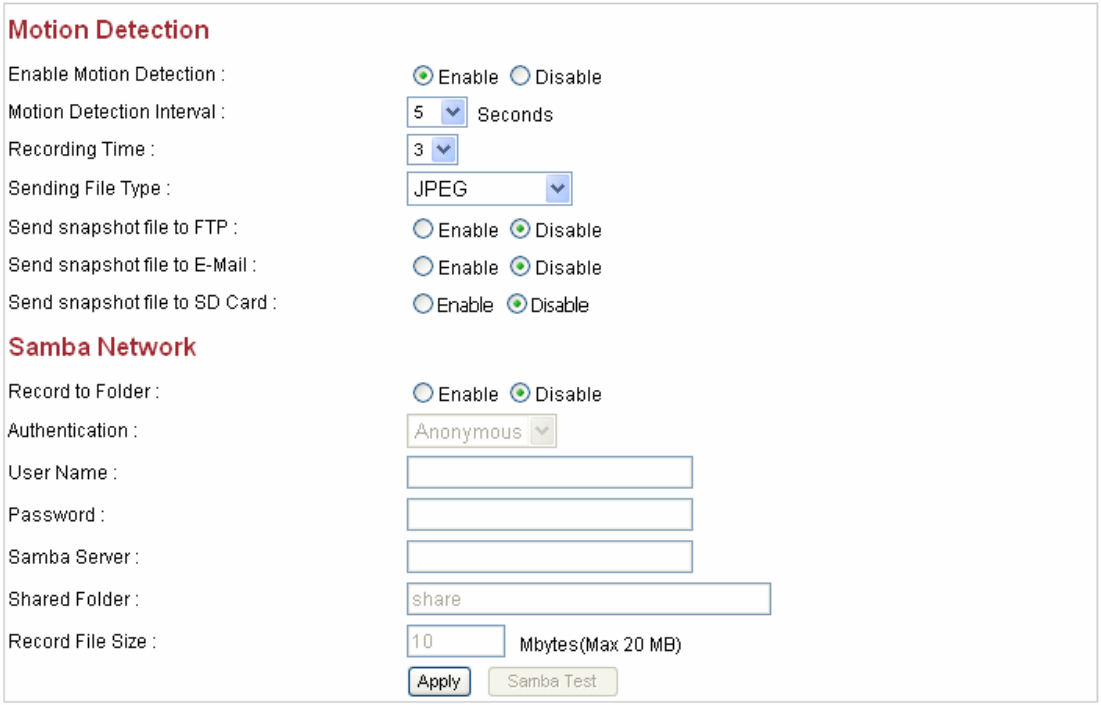


After you selected 'Motion Detection', a sub-menu will appear. There are 5 sub-menus available here:

1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

2.4.1 Motion Detection

You can use this menu to setup basic motion detection settings:


Motion Detection
Enable Motion Detection : Enable Disable
Motion Detection Interval : 5 Seconds
Recording Time : 3
Sending File Type : JPEG
Send snapshot file to FTP : Enable Disable
Send snapshot file to E-Mail : Enable Disable
Send snapshot file to SD Card : Enable Disable
Samba Network
Record to Folder : Enable Disable
Authentication : Anonymous
User Name :
Password :
Samba Server :
Shared Folder : share
Record File Size : 10 Mbytes(Max 20 MB)
Apply
Samba Test

The settings in this menu are described below:

Item	Description
Enable Motion Detection	Select 'Enable' to enable motion detection, and select 'Disable' to disable this function.
Motion Detection Interval	Select the time interval between two motions from dropdown menu. When a motion is detected, camera will not detect any motion again within the time interval you specified here. Available options are from 0 second (always detect new motion) to 60 seconds.
Recording Time	Select the duration you wish this camera to record image when a motion is detected from dropdown menu. Available options are 1, 2, 3, 4, and 5 (seconds).
Sending File Type	Select the file type that will be saved when a motion is detected. Select 'JPEG' and a still picture in JPEG format will be saved; and select 'AVI' to save a motion video clip.
Send snapshot file to FTP	Select 'Enable' to send the saved file to specified FTP server when a motion is detected, select' Disable' to disable this function. You have to configure FTP server parameters in 'FTP

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

	Configuration' menu first, for this function to take effect (see below section 2.4.4).
Send snapshot file to E-Mail	Select 'Enable' to send the saved file to specified E-mail address when a motion is detected, select' Disable' to disable this function. You have to configure mail server parameters in 'FTP Configuration' menu first, for this function to take effect (see below section 2.4.3).
Send snapshot file to SD Card	Select 'Enable' to send the saved file to the SD card on the camera when a motion is detected, select' Disable' to disable this function. You have to configure SD card parameters in 'SD HC' menu first, for this function to take effect (see below section 2.4.5).
Record to Folder	Select 'Enable' to save file to a network folder which supports SAMBA (also known as 'Windows Network Neighborhood'), select 'Disable' to disable this function.
Authentication	If username and password are not required to write files in specified folder, select 'Anonymous'; if required, select 'Account'.
User Name	Input user name required by destination network folder.
Password	Input password of the user name required by destination network folder.
Samba Server	Input the IP address or host name of network file server.
Shared Folder	Input the folder name on file server.
Record File Size	Input the maximum file size of saved file in Mbytes. Maximum file size is 20.

Click 'Apply' to save settings and make the new settings take effect.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

2.4.2 Motion Region

You can define the motion detection region within the image that camera captures, so this camera will ignore motions which are not covered by the motion region setting, and reduce the chances of false alarm.

The description of every setting in this menu will be given below:

Item	Description
Region 1 – 3	Check the box to enable motion detection region 1 to 3. You can check multiple boxes to enable multiple motion detection regions. When you check a box, a new region (and region number) will be displayed on captured image.
Sensitivity	Move the slide bar to change the motion detection sensitivity setting: Drag the slide to the right to increase sensitivity

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

	(camera will detect minor changes in the image), and drag the slide to the left to decrease sensitivity (camera will only detect major changes in the image).
Refresh	In case the objects of the image captured by the camera moved, click this button to reload the image captured by the camera, so you can decide the motion detection region more precisely.
Save	Save motion detection region settings.

To change the motion detection region, you can ‘resize’ and ‘reposition’ it:

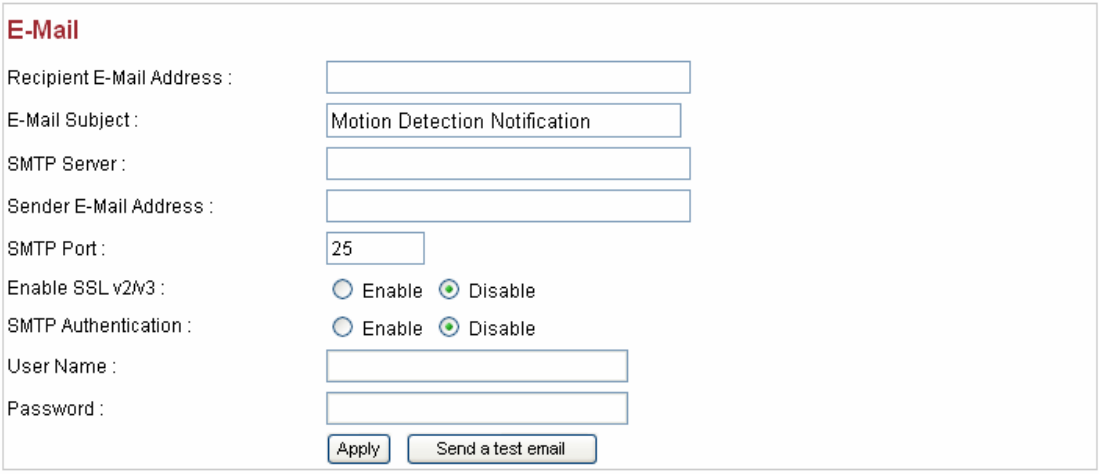
Move the mouse cursor to the eight dots located at the border of motion detection region, and the mouse cursor will switch to ↔ ↘ or ↕. You can click and hold mouse button and move the mouse to resize the motion detection region.

To move or reposition the motion detection region, move the mouse within the motion detection region, and the mouse cursor will switch to ✥. Click and hold mouse button and move the mouse to reposition the motion detection region.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

2.4.3 Email

You can define the destination address of E-mail sending and mail server parameters here.



The settings in this menu are described below:

Item	Description
Recipient E-Mail Address	Input the email recipient's Email address here.
E-Mail Subject	Specify the title of sending email, so you can identify the mail sent from this camera from others quickly.
SMTP Server	Input the IP address or host name of the SMTP server (the server that delivers the Email for you) here. If the IP address or host name is not known, please refer to the SMTP server you're using in your Email software (like Outlook, Outlook Express etc.), or check with your network administrator or ISP.
Sender E-Mail Address	Input the Email address of mail sender, this will help you to identify the Email sent by this IP camera by sender's Email address. NOTE: Some mail server would reject to deliver the Email from unknown sender. Hence it's recommended to input an Email address here.
SMTP Port	Input SMTP server's port number. In most cases it should be default value '25'.
Enable SSL v2/v3	If your email server requires SSL encryption, check this box. Please note that some email servers use different port number

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

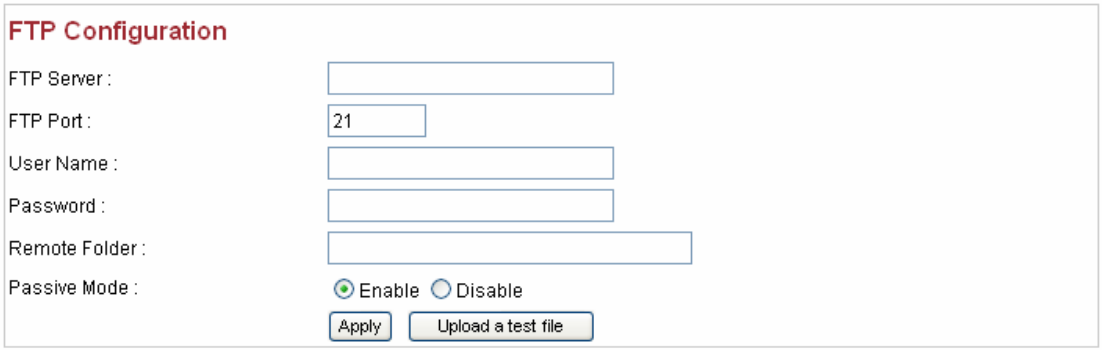
	than standard port 25 when SSL encryption is used.
SMTP Authentication	Some SMTP server requires mail senders to be authenticated before they can send Email. If your SMTP server requires you to do so, please select 'Enable', or select 'Disable' to disable it. For confirming requirement of authentication, please refer to the SMTP server you're using in your Email software (like Outlook, Outlook Express etc.), or check with your network administrator or ISP.
User Name	Please input the user name of SMTP server here, if your SMTP server requires the use of authentication.
Password	Please input the password of SMTP server here, if your SMTP server requires the use of authentication.

Click 'Apply' to save settings and make the new settings take effect.
Once configured, click 'Send a test email' to verify the email setting.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

2.4.4 FTP Configuration

You can set FTP server's parameters here.



The settings in this menu are described below:

Item	Description
FTP Server	Input the IP address or host name of the FTP server you wish to use here.
FTP Port	Input the port number of the FTP server you wish to use here. Default port no. is 21.
User Name	Input the user name of the FTP account you wish to use here.
Password	Input the password of the FTP account you wish to use here.
Remote Folder	Input the remote folder name on the FTP server here. If nothing is specified here, all uploaded image files will be placed in FTP server's root directory. Please check with the FTP server's administrator for the folder name that can be used to store the images from the IP Camera. This is required as the folders in the FTP servers may be secured with access (read/write) permissions.
Passive Mode	Select 'Enable' to use passive mode to send file, or select 'Disable' not to use passive mode to send file. Most of the FTP servers can work fine in both Passive and Non-Passive modes. However, if in doubt, the FTP Server's administrator should be able to help.

Click 'Apply' to save settings and make the new settings take effect.
Once configured, click 'Upload a test file' to send a file to the FTP to verify the functioning of the settings.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

2.4.5 SD Card Configuration

You can define the filename and destination folder when saving a file in SD card.

The settings in this menu are described below:

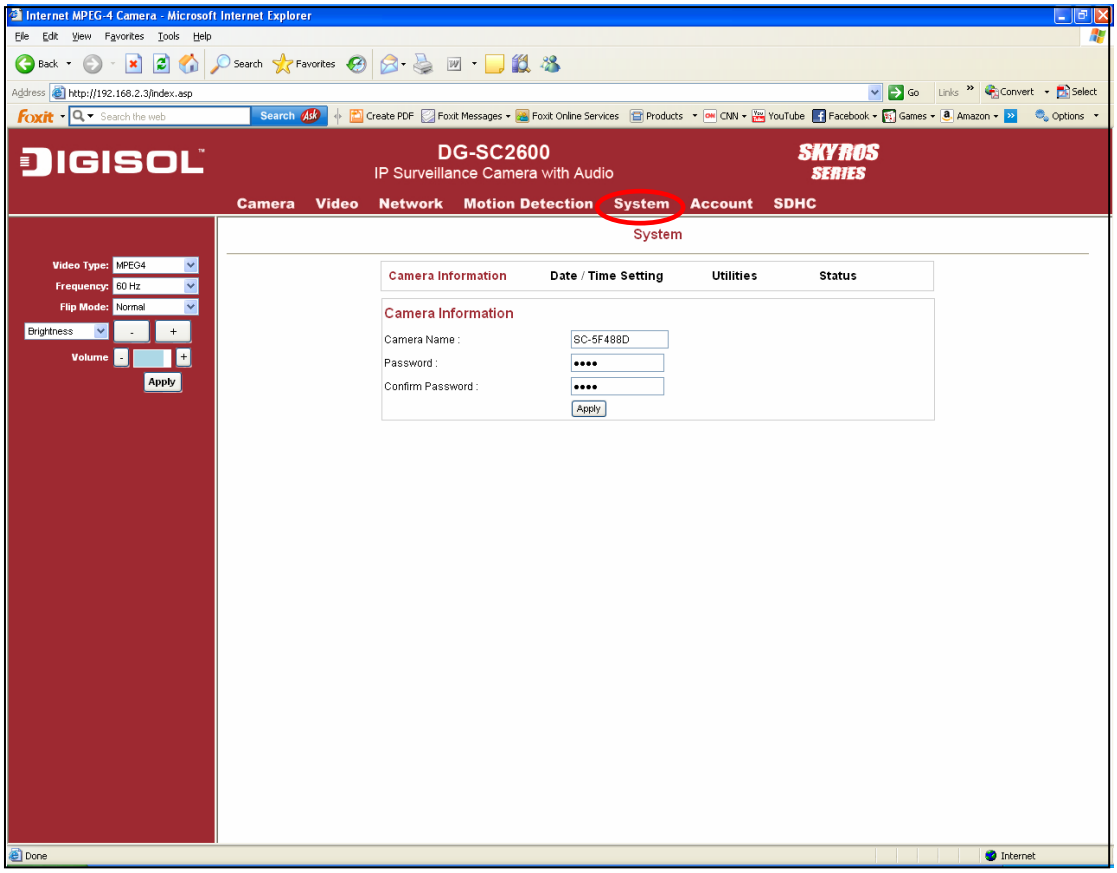
Item	Description
Enable Cycle Recording	Check this box and this camera will automatically erase oldest image file to make room for new image files when SD card is full (By default this box is checked). If you don't want to loose old image files, do not check this box.
File Name Prefix	Specify the filename prefix (the texts which will be added before the file sequence number).
Destination Folder	Specify the folder name in which the camera will store the saved image or video clip.

Click 'Apply' to save settings and make the new settings take effect.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

2.5 System Info

You can use this menu to get the operational information of this camera:

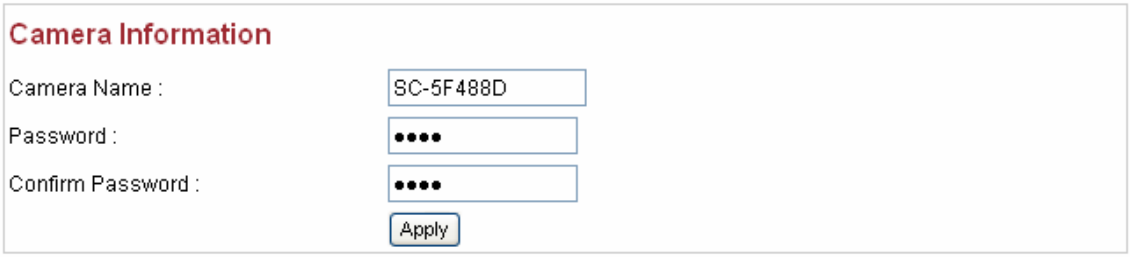


After you selected ‘System’, the sub-menus will appear. There are 4 sub-menus available here:

1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

2.5.1 Camera Information

Camera information allows you to set the name and administrator's password of this camera.



The settings in this menu are described below:

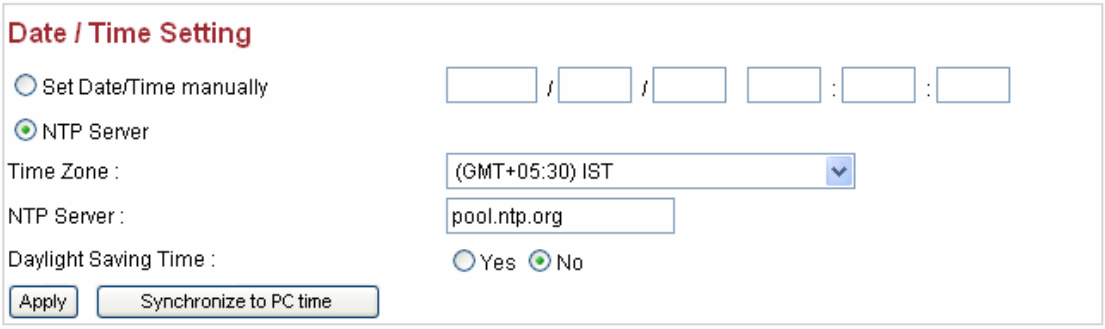
Item	Description
Camera Name	Please specify the name for this IP Camera here. This can be used to identify your camera on the network when you have more than one IP camera in the same network. Default name begins with 'SC-'plus the last 6 characters of the MAC address of this IP camera. You can modify the name to the one you can remember and meaningful to you.
Password	Please specify the password here. (The one you need when you log onto web management interface by using 'admin' as user name)
Confirm Password	Please input the same password again, to make sure there's no typographical error.

Click 'Apply' to save settings and make the new settings take effect.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

2.5.2 Date / Time Setting

This setting allows you to change the date and time of the built-in clock in this IP camera. You can set the time manually, or use network time protocol (NTP) to set the time automatically.



The settings in this menu are described below:

Item	Description
Set Date/Time manually	If you select 'Set Date/Time manually', you can set the date and time of this camera manually. Please input the date and time you wish to set here. Date / time format is YYYY / MM / DD HH:MM:SS Time is in 24-hour format. You can click 'Synchronize to PC time' to use the time of the computer you're using. Example: 24th August 2007 = 2007/ 08 / 24, and PM 9:24:30 = 21:24:30 If you select 'NTP Server', the camera will get the date and time from NTP Server automatically.
Time Zone	Please select the time zone of the country / city of resident from the dropdown menu here.
NTP Server	Please input the IP address or host name of NTP server here. You can use default value 'pool.ntp.org', or ask your ISP for the IP address or host name, if they have one.
Daylight Saving Time	If the location of the camera uses daylight saving, select 'Yes'; otherwise select 'No'.
Synchronize to PC time	Click to input current time of your computer to 'Set Date / Time manually' field.

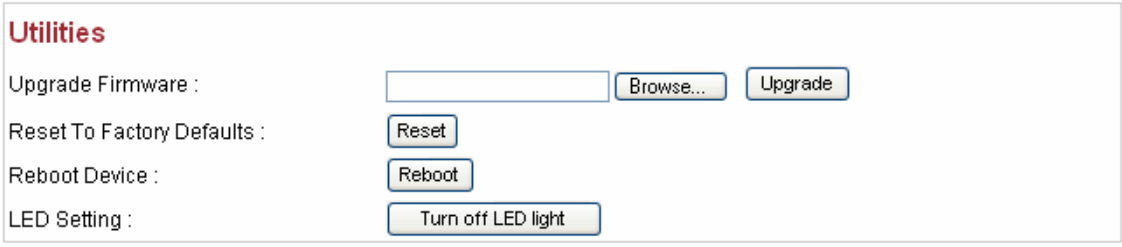
☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

Click ‘Apply’ to save settings and make the new settings take effect.

If you wish to use the date and time setting of the computer which is connecting to the camera, click ‘Synchronize to PC time’ button. The date and time setting of the computer will be filled to date and time setting in this page.

2.5.3 Utilities

This menu allows you to upgrade firmware, clear all settings, reboot the IP camera, and switch LED lights on/off.



The description of every setting in this menu will be given below:

Item	Description
Upgrade Firmware	If you downloaded latest firmware file from our website, you can click ’Browse’ button to pick the firmware file located on your computer’s hard drive and you can upload the firmware file to the IP camera. After you selected a proper firmware file from your computer, click ‘Upgrade Firmware’ button to start upgrade. DO NOT DISCONNECT NOW. If the firmware file you provided is invalid or you didn’t provide the firmware file, you’ll be prompted to select another valid firmware file again. The IP camera will reboot after the upgrade procedure is done.
Reset to Factory Defaults	Clear all settings in the camera. Please think again before you do this, and then click this button to reset all settings. NOTE: IP address will be reset to default value ‘192.168.2.3’ also. You’ll need to change the IP address setting of your computer if the IP address of your computer does not begin with ‘192.168.2’, and subnet mask is not ‘255.255.255.0’, or you’ll not be able to connect to this IP camera again.
Reboot Device	If you found the IP camera is responding slowly or behaves

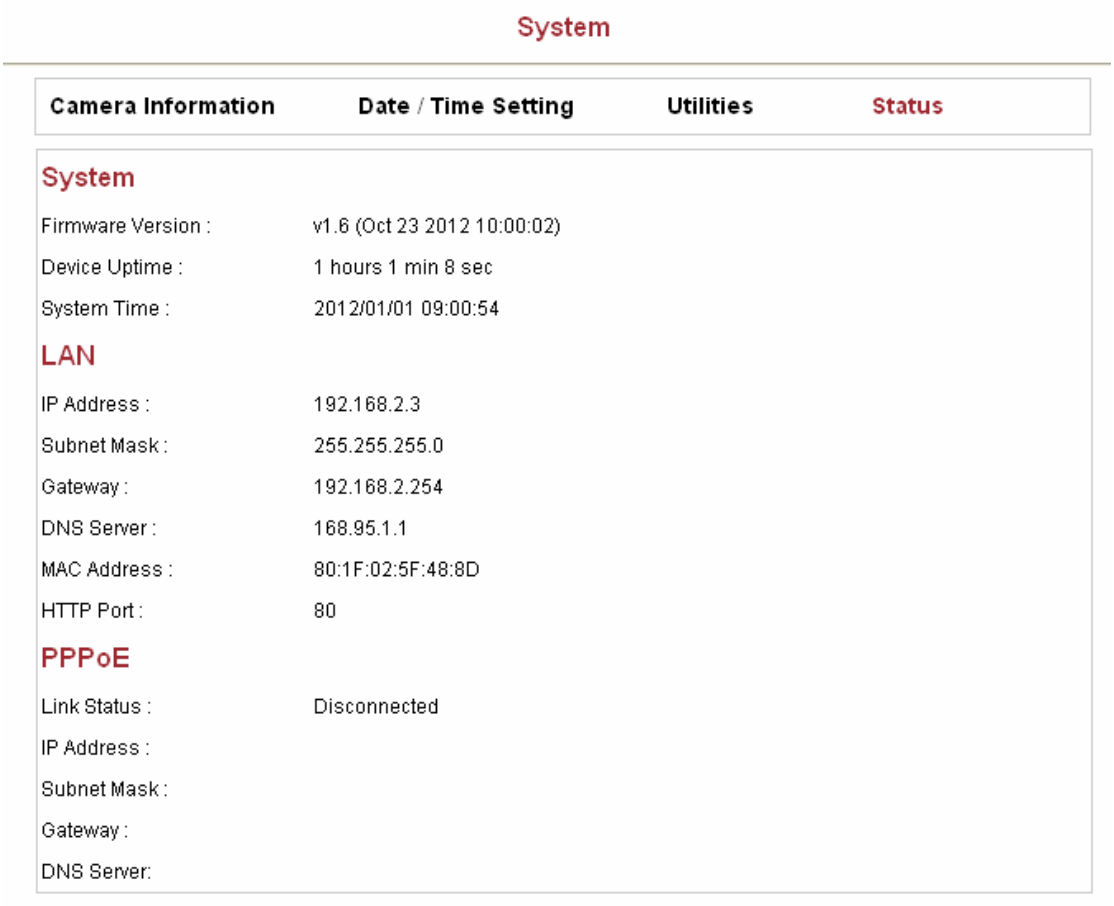
☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

	strange, you can click this button to try to reboot the IP camera, this may help.
LED Setting	Click 'Turn off LED light' button to switch the LED light of this IP camera off, so all LEDs on the IP camera will stop working, in case you don't want other people to know the camera is transferring data. You can click this button again to switch LED lights on again.

Click 'Apply' to save settings and make the new settings take effect.

2.5.4 Status

This menu provides all information about this IP camera, like firmware version, system uptime, date / time and network information.



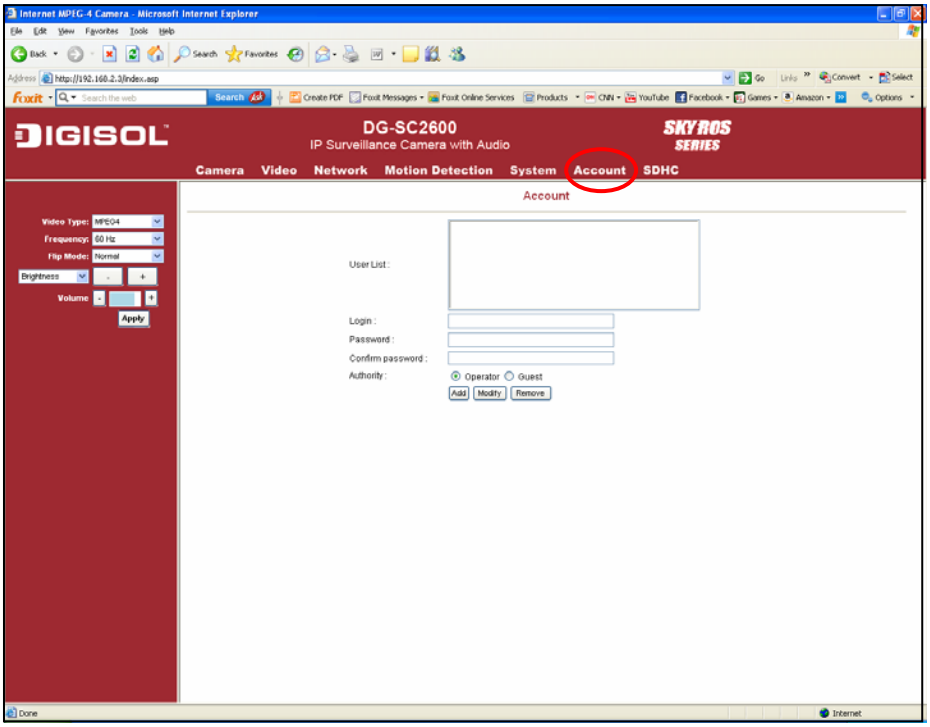
☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

2.6 Account

If you wish to allow other people to view the live image captured by this camera, but don't want to allow them to modify system settings, you can give them user-level user name and password, so they can only view the image and cannot change any system setting.

This camera supports up to 16 users.

After you selected 'Account', you'll be prompted to input user account information:



The settings in this menu are described below:

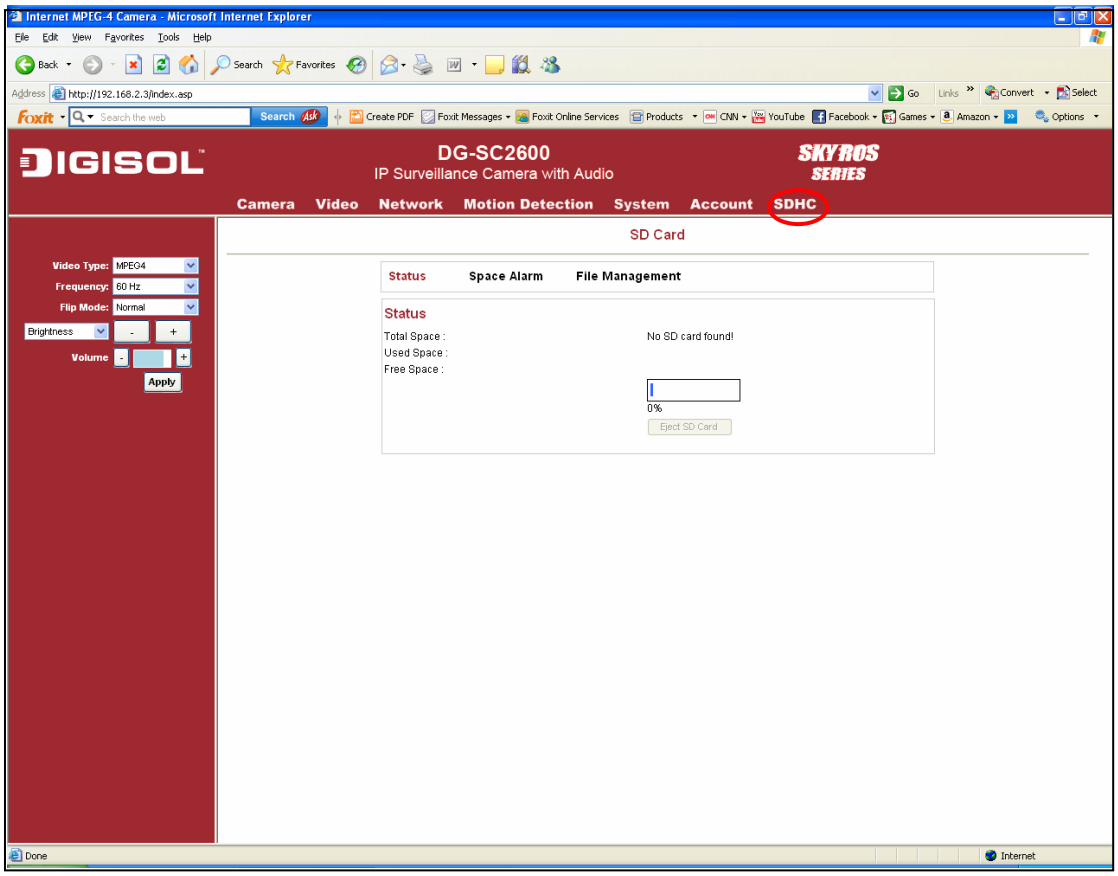
Item	Description
User List	Lists all users currently available.
Login	Input the login name (user name) of this account.
Password	Input the password of this user here.
Confirm password	Input the password of this user here again for confirmation.
Authority	Select the privilege of this user: Operator (able to change system settings) or Guest (View images only).
Add	Click this button to add the account.
Modify	Modify an existing user's information. You have to select a user from user list first.
Remove	Remove an existing user. You have to select a user from user list first.

Click 'Apply' to save settings and make the new settings take effect.

1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

2.7 SDHC

You can reach this menu by clicking ‘SDHC’ on the top of web management interface.



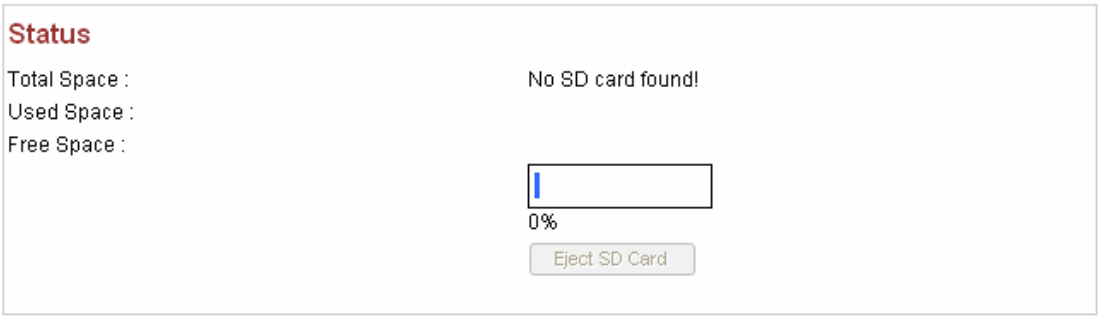
After you selected ‘SDHC’, sub-menus will appear. There are 3 sub-menus available here:

Please click the SD card setting you wish to set, and then refer to the instructions given below:

1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

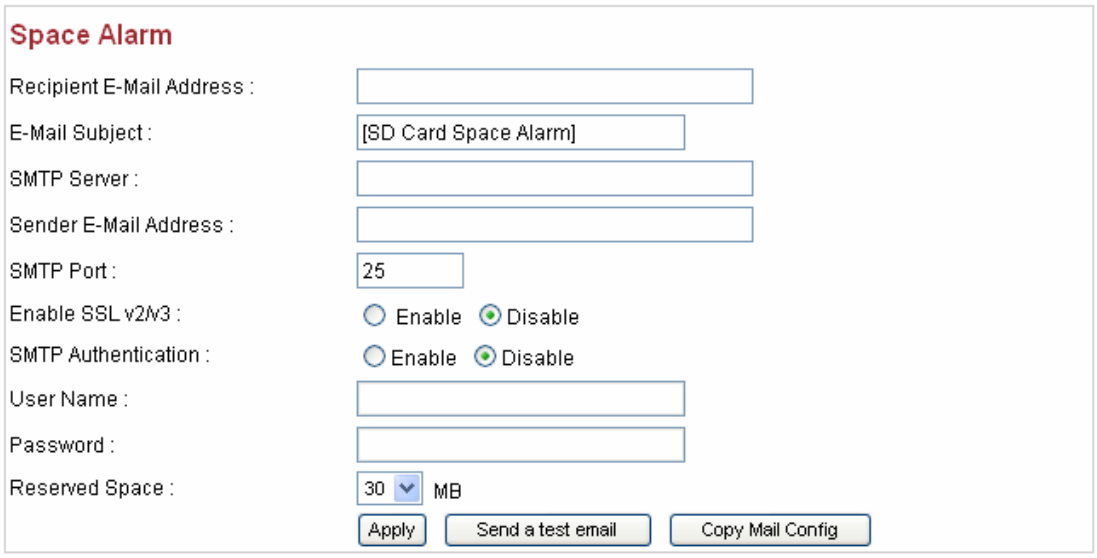
2.7.1 Status

This screen shows the details of the card space utilization.



2.7.2 Space Alarm

When you're using SD card to store captured image and video clip, you can have this camera send an E-mail to you when there's little space left on SD card.



Please note: If you have set E-mail settings in 'Motion Picture' function, you can click 'Copy Mail Config' button to use the same setting. However, you can also configure a different setting here.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

The settings in this menu are described below:

Item	Description
Recipient E-Mail Address	Input the E-mail address where you wish to receive space alarm.
E-Mail Subject	Input the title of space alarm E-mail.
SMTP Server	Input the SMTP server address you wish to use to send the E-mail.
Sender E-Mail Address	Input the sender E-mail address for the space alarm E-mail.
SMTP Port	Input SMTP server's port number. In most cases it should be default value '25'.
Enable SSL v2/v3	If your email server requires SSL encryption, check this box. Please note that some email servers use different port number than standard port 25 when SSL encryption is used.
SMTP Authentication	Some SMTP servers require mail senders to be authenticated before they can send Email. If your SMTP server requires you to do so, please select 'Enable', or select 'Disable' to disable it. For confirming, requirement of authentication, please refer to the SMTP server you're using in your Email software (like Outlook, Outlook Express etc.), or check with your network administrator or ISP.
User Name	Please input the user name of SMTP server here, if your SMTP server requires the use of authentication.
Password	Please input the password of SMTP server here, if your SMTP server requires the use of authentication.

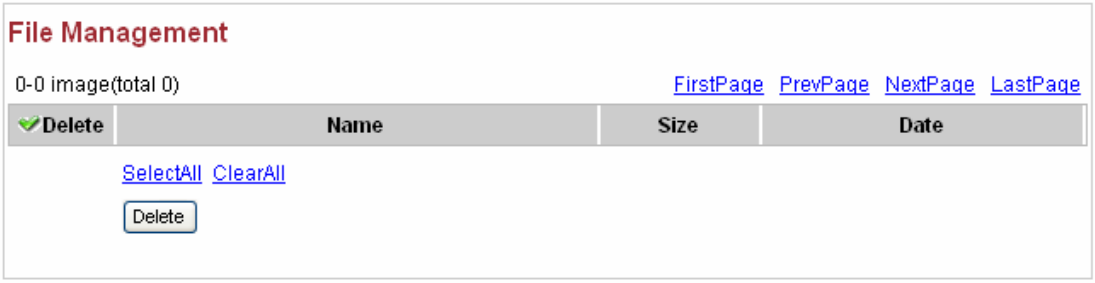
Click 'Apply' to save settings and make the new settings take effect.

Once configured, click 'Send a test email' to verify the email setting.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

2.7.3 File Management

You can use this menu to manage the files stored on SD card.



The settings in this menu are described below:

Item	Description
FirstPage	Jump to first page of file list.
PrevPage	Jump to previous page of file list.
NextPage	Jump to next page of file list.
LastPage	Jump to last page of file list.
SelectAll	Select all files in this page.
ClearAll	Clear all files in this page.
Delete	Delete selected files.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

3 Using SKYROS Surveillance Manager Software

3.1 Installing SKYROS Surveillance Manager Software

The SKYROS Surveillance Manager software provides various functions like video recording. Please follow the below mentioned instructions to install the surveillance software.

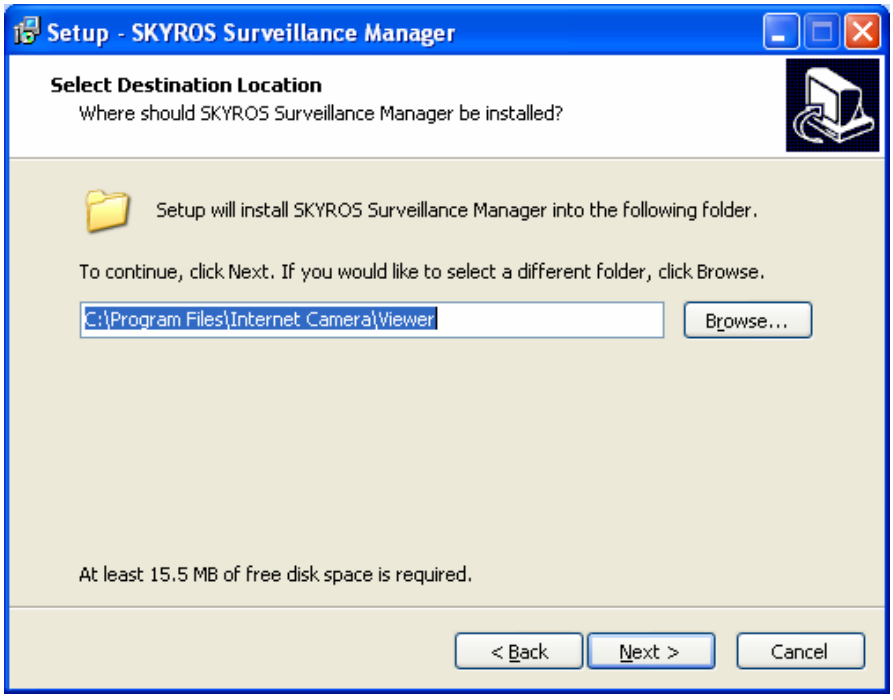
1. Please insert the Installation Software CD-ROM supplied in the product package, and the CD will automatically run. Click on the Install SKYROS Surveillance Manager.

Then follow the below mentioned instructions to install SKYROS Surveillance Manager

1. The following window appears, click ‘Next’.

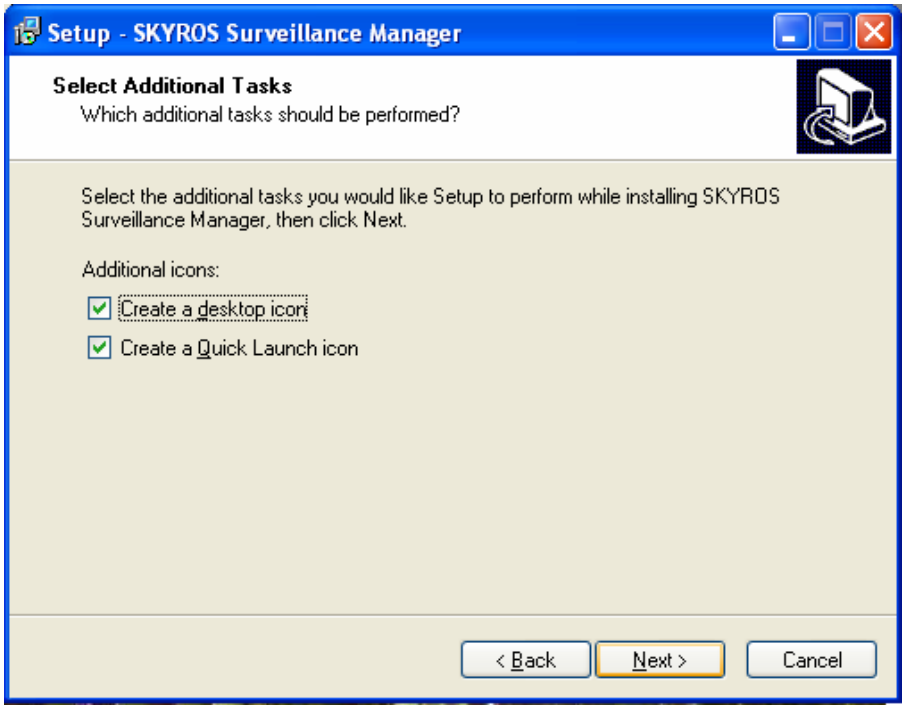
Setup - SKYROS Surveillance Manager
Welcome to the SKYROS Surveillance Manager Setup Wizard
This will install SKYROS Surveillance Manager 3.0.4.8 on your computer.
It is recommended that you close all other applications before continuing.
Click Next to continue, or Cancel to exit Setup.
Next >
Cancel

2. You can specify the destination folder of software installation; you can just use the default folder, and click ‘Next’ to continue.

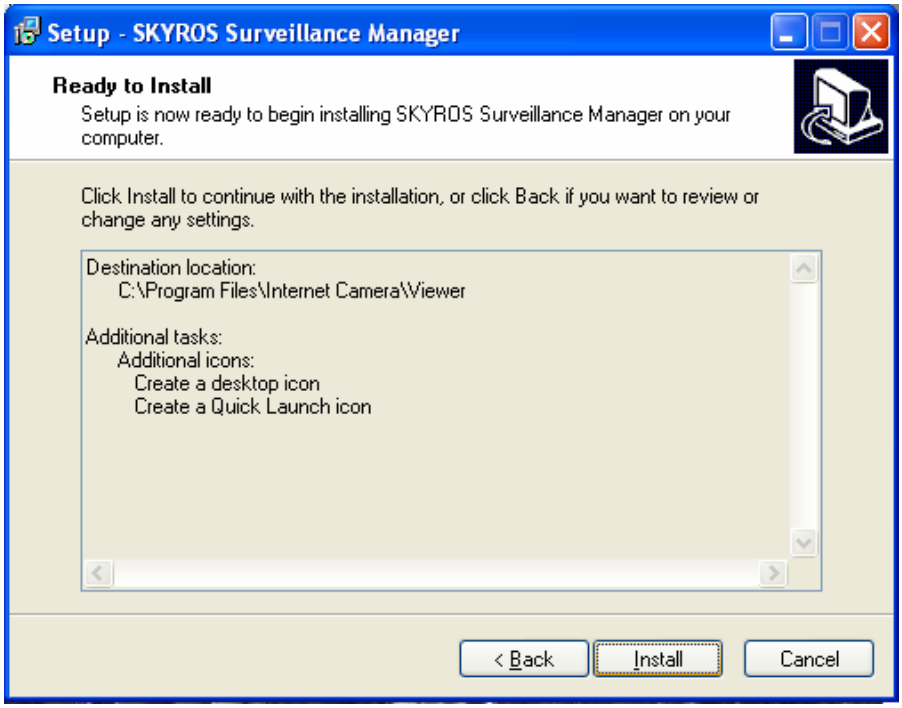

Setup - SKYROS Surveillance Manager
Select Destination Location
Where should SKYROS Surveillance Manager be installed?
Setup will install SKYROS Surveillance Manager into the following folder.
To continue, click Next. If you would like to select a different folder, click Browse.
C:\Program Files\Internet Camera\Viewer
Browse...
At least 15.5 MB of free disk space is required.
< Back
Next >
Cancel

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

3. If you need the installation program to create a desktop icon or a quick launch icon, you can accordingly select them here, and click ‘Next’ to continue.

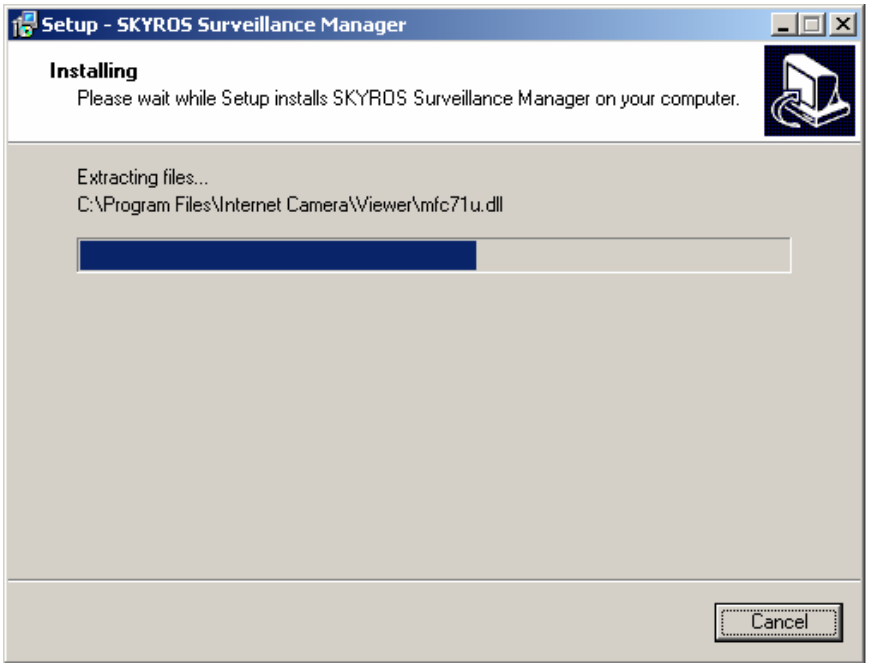

Setup - SKYROS Surveillance Manager
Select Additional Tasks
Which additional tasks should be performed?
Select the additional tasks you would like Setup to perform while installing SKYROS Surveillance Manager, then click Next.
Additional icons:
Create a desktop icon
Create a Quick Launch icon
< Back
Next >
Cancel

4. The next screen lists all options you chose in previous steps, if everything is as configured, click ‘Install’ to start the installation procedure, or click ‘Back’ to go back to previous step to modify installation settings.


Setup - SKYROS Surveillance Manager
Ready to Install
Setup is now ready to begin installing SKYROS Surveillance Manager on your computer.
Click Install to continue with the installation, or click Back if you want to review or change any settings.
Destination location:
C:\Program Files\Internet Camera\Viewer
Additional tasks:
Additional icons:
Create a desktop icon
Create a Quick Launch icon
< Back
Install
Cancel

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

5. The installation procedure will take some time, please be patient.



6. When you see this window, it means the software installation procedure is complete. Please click ‘Finish’ to finish the procedure (the SKYROS surveillance Manager Software will start once the ‘Finish’ button is clicked. However, to start the software later, uncheck ‘Launch the SKYROS Surveillance Manager’ tick box).

Setup - SKYROS Surveillance Manager
Completing the SKYROS Surveillance Manager Setup Wizard
Setup has finished installing SKYROS Surveillance Manager on your computer. The application may be launched by selecting the installed icons.
Click Finish to exit Setup.
Finish

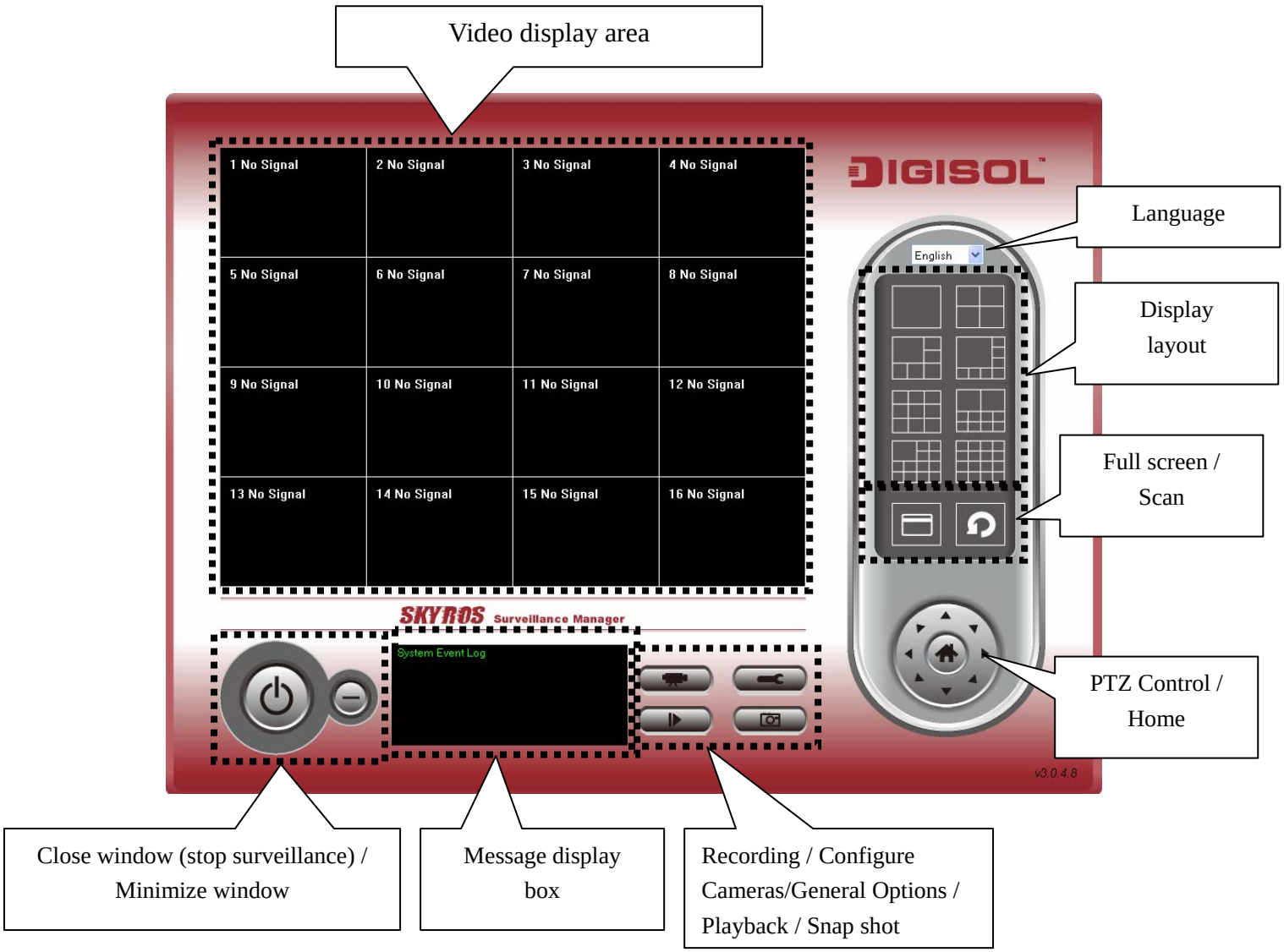
☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

3.2 Using SKYROS Surveillance Manager software

You can click ‘SKYROS Surveillance Manager’ icon from desktop, quick launch bar, or start menu to start the IP camera surveillance software.

Before you start:
The SKYROS Surveillance Manager software will only work when your monitor’s resolution is ‘1024 x 768’. Please change the resolution before you use IP camera surveillance software, or it won’t start.

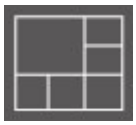
Here are descriptions of all components of the SKYROS Surveillance Manager software:



☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

Moving the mouse cursor over certain sections of the screen provides the buttons name.

Below are the detailed descriptions of all buttons:

Item	Description
Video displaying area	The image of all connected cameras will be displayed here.
Language	Select a language from this dropdown menu to change display language.
Display layout 	Change camera image display layout (Click a layout icon to change camera display layout). There are 8 kinds of available display layouts.
Full screen	Click this button to switch to full screen mode (only display all camera's image), press 'ESC' key to quit full screen mode.
Scan	Click this button and the IP camera surveillance software will switch displaying the image of all connected camera automatically. Click this button once to activate scan function (scan icon will become blue), click again to stop scanning (scan icon will become white).
PTZ control	There are 8 directions in PTZ control ring. If the camera you connect supports PTZ, you can use PTZ control ring to change the direction that camera points to. This function is only available for supported cameras.
Home	Click this button to return the camera to 'Home' (default) position. This function is only available for supported cameras.
Recording	Start video recording.
Setup	Software / camera configuration.
Playback	Playback a recorded video file.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

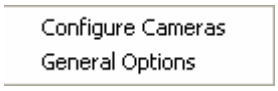
Snapshot	Take a snapshot of current camera.
Message display	Displays all system messages like camera is disconnected etc.
Close window (stop surveillance)	Terminates IP camera surveillance software.
Minimize window	Minimizes IP camera surveillance software window.
Video display area	Displays the image of all cameras by the display layout you selected.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

3.3 Configuring the SKYROS Surveillance Manager software

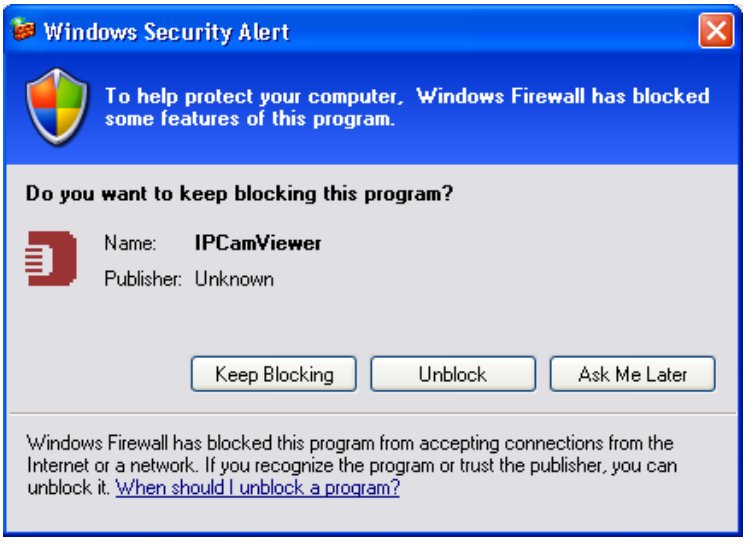
3.3.1 Configuring cameras

Before you use the SKYROS Surveillance Manager software, you must configure the camera(s) you wish to connect. Please click 'Setup' button and the below popup menu will appear:



Please select 'Configure Cameras' to configure cameras:

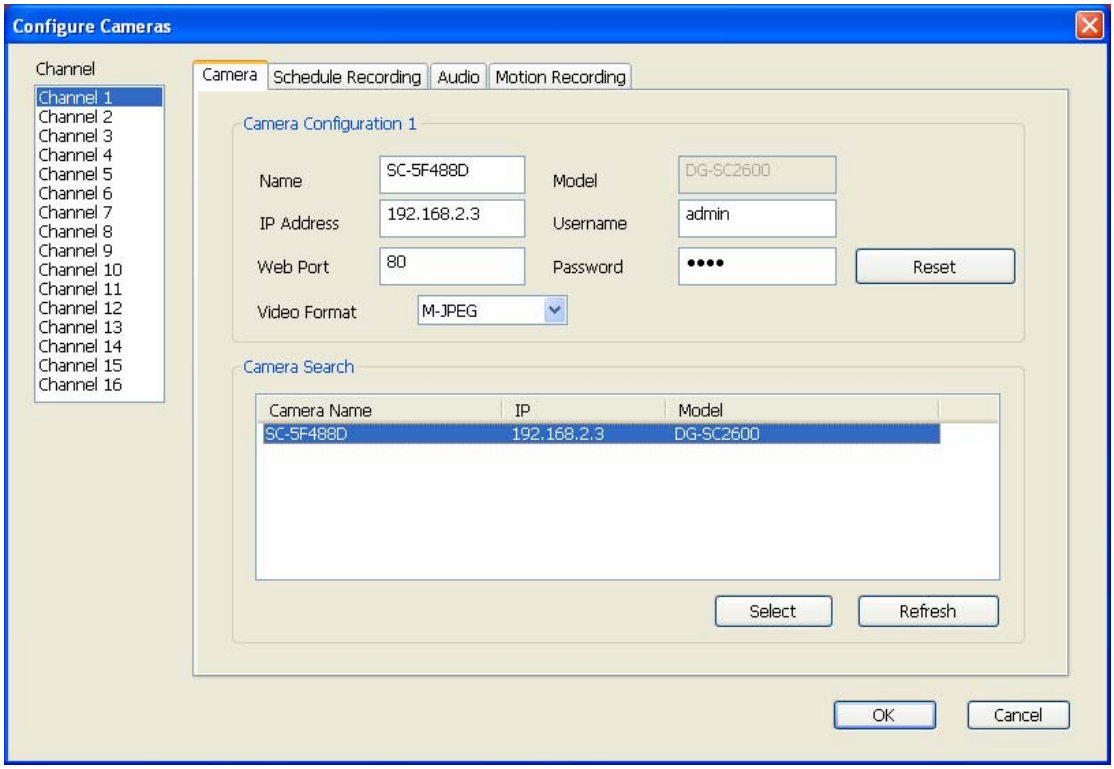
Note: If you're prompted by a windows security alert which asks you if you want to block 'IPCamViewer' program, please click 'Unblock' button, else the SKYROS Surveillance Manager software will not be able to function correctly.


Windows Security Alert
To help protect your computer, Windows Firewall has blocked some features of this program.
Do you want to keep blocking this program?
Name: IPCamViewer
Publisher: Unknown
Keep Blocking
Unblock
Ask Me Later
Windows Firewall has blocked this program from accepting connections from the Internet or a network. If you recognize the program or trust the publisher, you can unblock it. When should I unblock a program?

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

3.3.1.1 'Camera' tab

In this tab you can configure all cameras you wish to connect. Up to 16 cameras can be connected simultaneously:



Below are the detailed descriptions of all the settings:

Item	Description
Channel	Select the channel number you wish to set.
Camera Search	All cameras found on your local network will be displayed in 'Camera Search' box.
Select	Select a camera listed in 'Camera Search' box, and click 'Select' button to automatically fill all parameters of selected camera in the configuration fields.
Refresh	Rescan all cameras on your local network. If you didn't see the camera you expected in 'Camera Search' box, or new cameras have been introduced to your local network after last scan.
Name*	Input the name of camera here. Default value is the last 6 bytes of camera's MAC address; you can change the name of camera as per your convenience.
Model	Displays the model of selected camera, this field can not be changed.
IP Address*	Input the IP address of camera.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

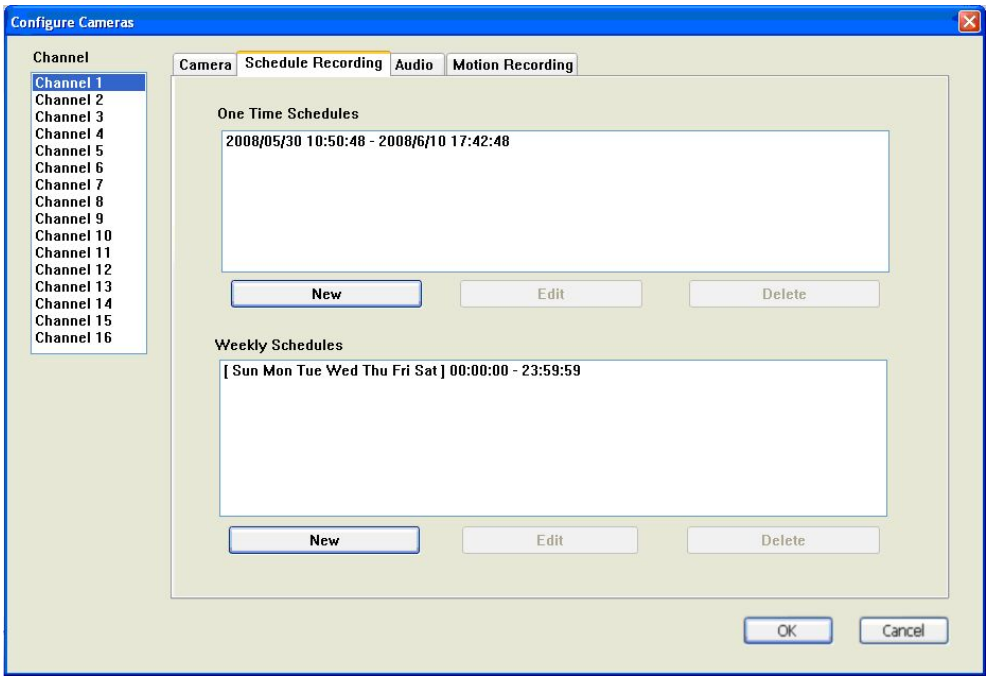
Username*	Input the user name of camera.
Web Port*	Input the web port of the camera. By default it's '80'.
Password	Input the password of camera. Default value is '1234'. You should change the password if you have changed the password of selected camera.
Video Format**	Select the video encoding format of this camera (MJPEG, H.264 or MPEG4).
Reset	Clear all fields in 'Camera Configuration' section.
OK	Save settings in this tab.
Cancel	Discard all settings in this tab.

*: It is recommended to use 'Select' button to fill the content of this field.
**: Only available for cameras that support this function.

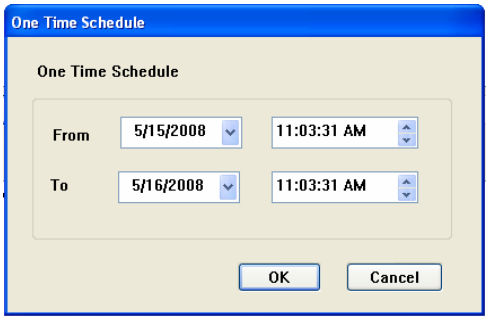
After you've configured all channels you wish to set, click 'OK' to save the settings, and if everything's correct, you'll see the camera's image in IP camera surveillance software's main menu:

3.3.1.2 Schedule Recording

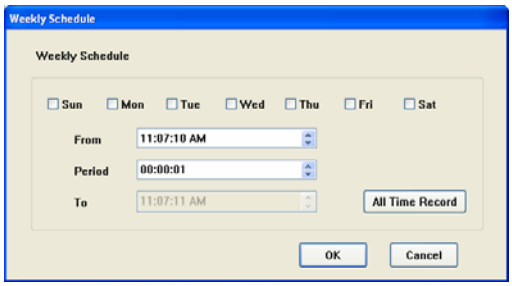
In this tab, schedules for recording video captured by the IP Cameras can be pre-defined.



Below are the descriptions of the settings:

Item	Description
Channel	Select the channel number you wish to schedule the recording.
One Time Schedules	You can specify the one-time schedule for selected camera; this schedule will be executed once only.
New (One Time Schedules)	Click this button and a new window will appear:  Please specify the time duration of this one-time schedule (the date and time of 'From' and 'To'), then click 'OK' to save settings.

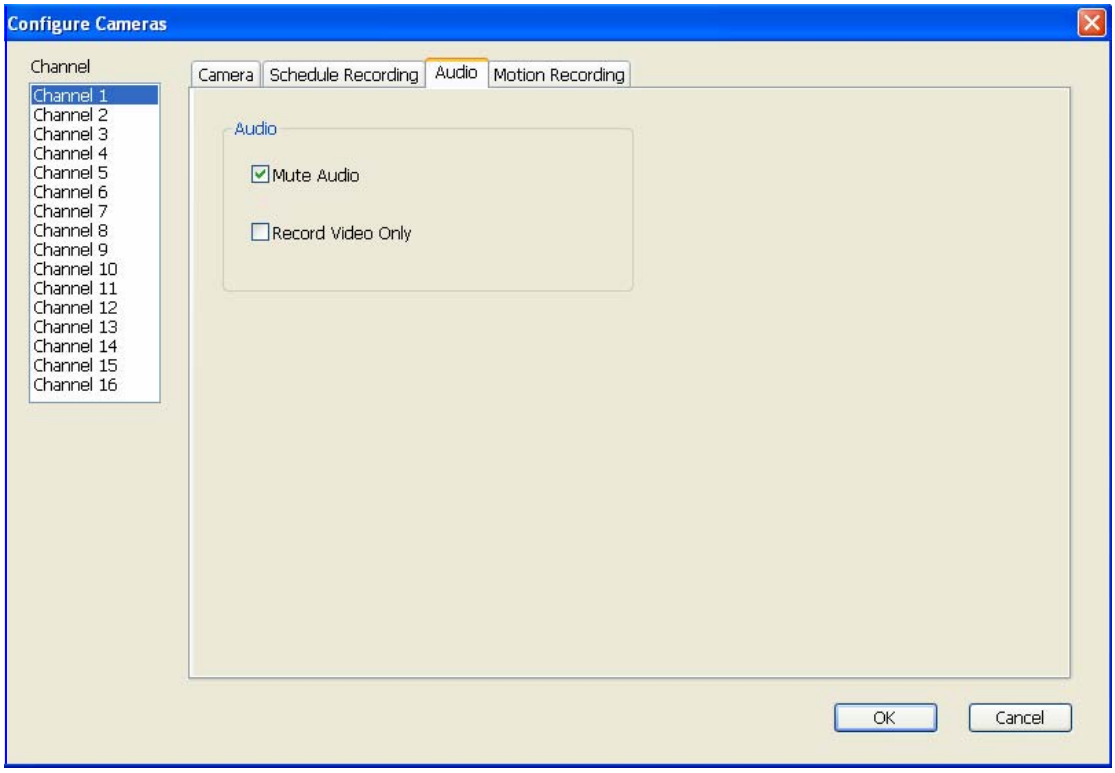
☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

	Please note you must set a schedule that will happen in the future, you cannot set a schedule in the past.
Edit	You can modify a scheduled recording item. Select a schedule in 'One Time Schedules' list, and click 'Edit' button to edit the start and end time of this schedule.
Delete	Delete a selected schedule item.
New (Weekly Schedules)	Click this button and a new window will appear:  You can define recording schedule that will be executed at the specified time of certain day(s) in a week. Please check all weekdays that apply, and set the start time in 'From' field. You can set the duration of video recording in 'Period' field (format is HH:MM:SS), and the end time will be calculated automatically and displayed in 'To' field. You can also click 'All Time Record' button to define a recording schedule that will be executed every weekday, from 12:00:00AM to 11:59:59PM. Click 'OK' to save changes.
Edit	You can modify a scheduled recording item. Select a schedule in 'Weekly Schedules' list, and click 'Edit' button to edit the start and end time of this schedule.
Delete	Delete a selected schedule item.
OK	Save settings in this tab.
Cancel	Discard all settings in this tab.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

3.3.1.3 Audio

For cameras that support audio, you can use this tab to decide if you wish to hear the audio captured by selected camera.



The settings are described below:

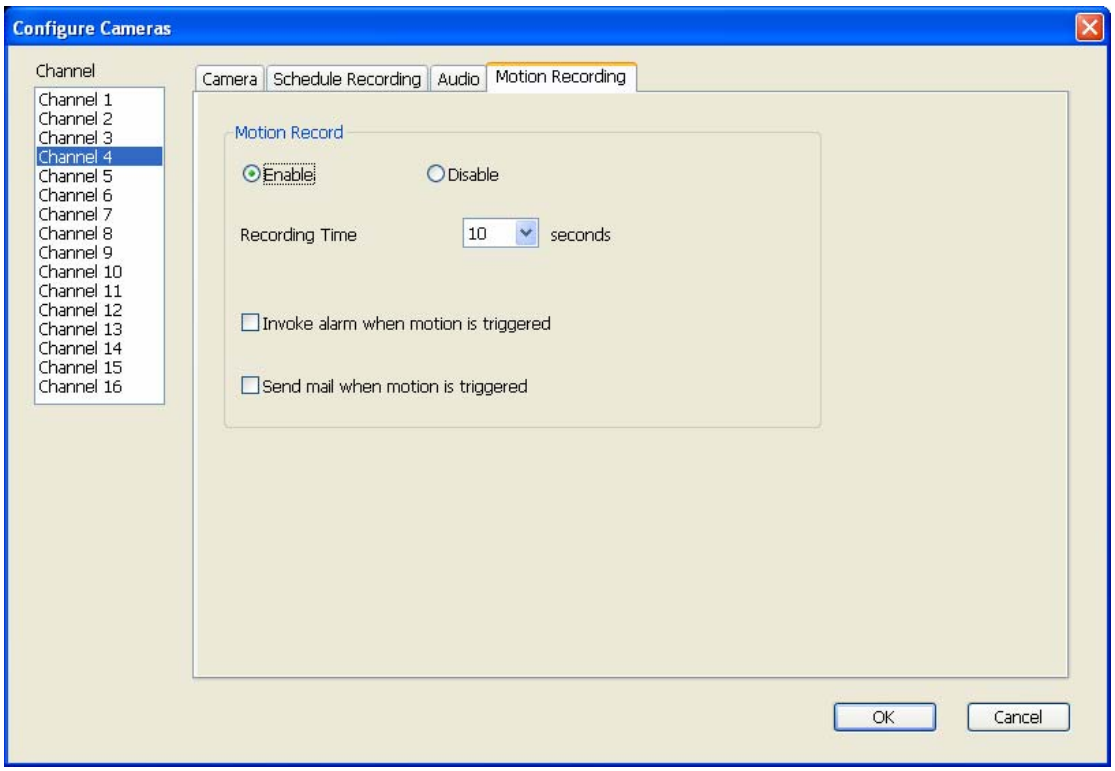
Item	Description
Channel	Select the channel number you wish to set.
Mute Audio	Check this box and the IP camera surveillance software will not play the audio captured by this camera.
Record Video Only	Check this box and the IP camera surveillance software will not record the audio captured by this camera.
OK	Save settings in this tab.
Cancel	Discard all settings in this tab.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

3.3.1.4 Motion Recording

When this function is activated, only motions captured by the camera will be recorded, so hard disk storage space is not wasted on images that do not need attention.

WARNING: For applications that require high security, it is not recommended to use this function since certain minor changes/movements may not trigger the camera to record. This may not be desirable.



The settings are described below:

Item	Description
Channel	Select the channel number you wish to set.
Enable	Enable motion record function.
Disable	Disable motion record function.
Recording Time	Select the time duration that camera will record when a motion has been detected from dropdown menu in seconds.
Invoke alarm when motion is triggered	Send an alarm when a motion has been detected by the camera.
Send mail when motion is triggered	Send an email to a pre-defined address when a motion has been detected by the camera.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

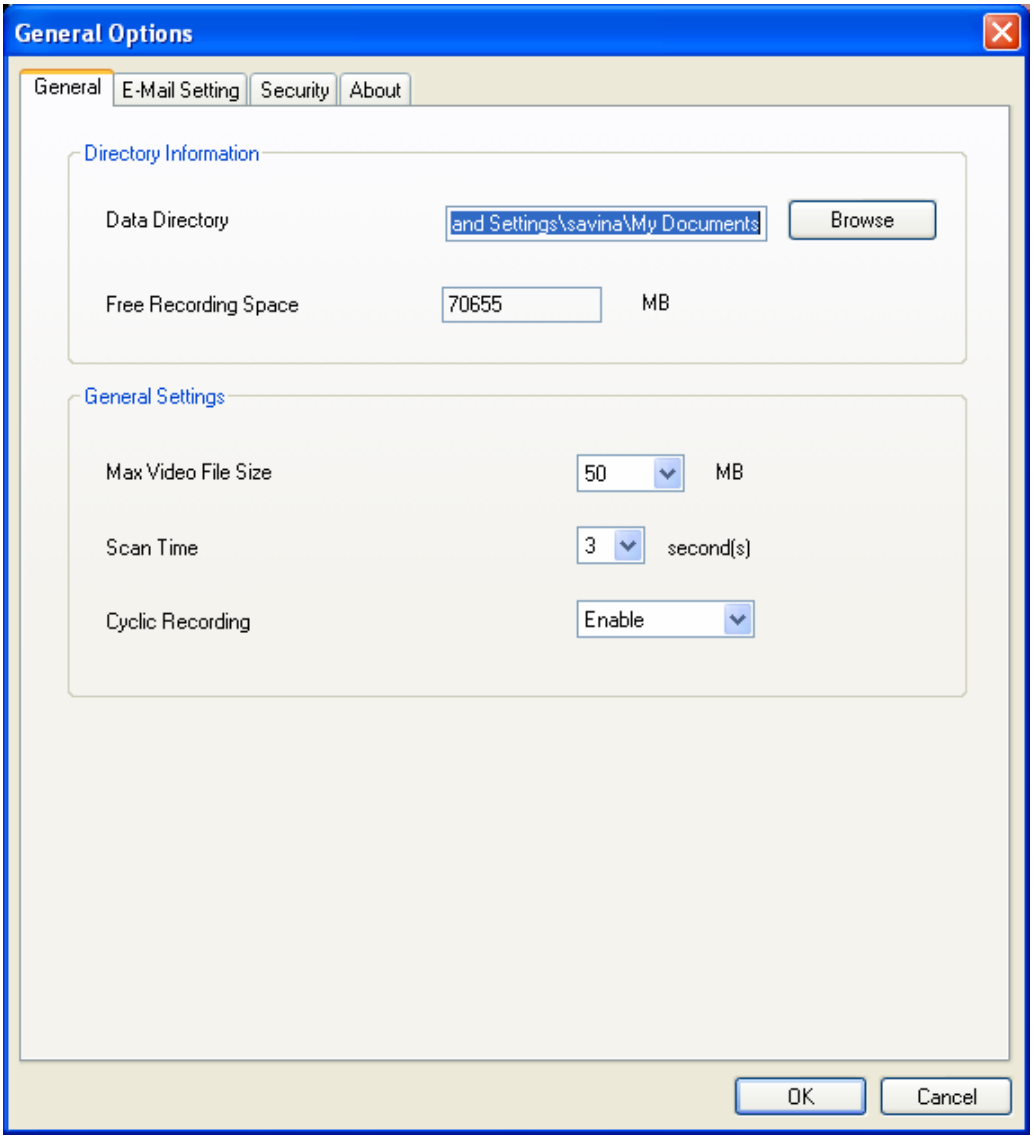
OK	Save settings in this tab.
Cancel	Discard all changes done in this tab.

3.3.2 General Settings

You can set system-wide settings of this IP camera surveillance software in this menu.

3.3.2.1 'General' tab

All general settings like file storage directory and recording spaces can be set here.



☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

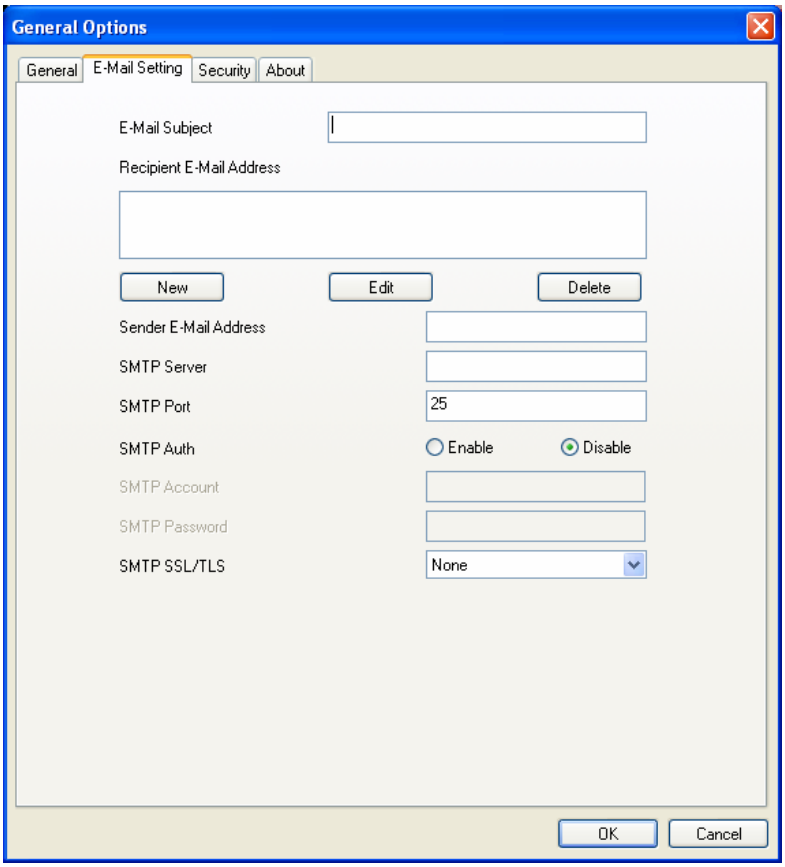
The settings are described below:

Item	Description
Data Directory	Set the directory (folder) you wish to store the recorded video and captured image. You can click ‘Browse’ button to select a directory in your hard disk.
Free Recording Space	Displays remaining storage space.
Max Video File Size	Defines the maximum file size of each video file. When the size of the file exceeds this value, IP camera surveillance software will open another file to record the video.
Scan Time	Define the time period to pause between every camera switch when you activate ‘Scan’ function.
Cycle Recording	You can decide the behavior when hard disk space is full: Disable: Do not overwrite recorded video files. Enable: Overwrite recorded video files.
OK	Save settings in this tab.
Cancel	Discard all changes done in this tab.

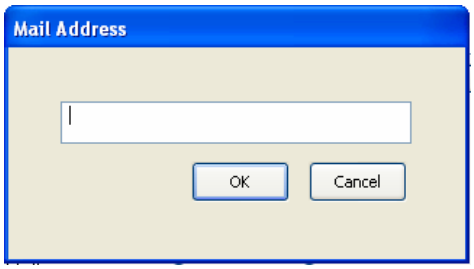
☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

3.3.2.2 'E-Mail Setting' tab

If you want to use motion detection function and wish to get an email that contains the image captured by the camera, please setup your email related parameters here.



The settings are described here:

Item	Description
E-Mail Subject	Specify the subject of sending email.
Recipient E-Mail Address	This is the list of all email addresses you set.
New	Click this button and you'll be prompted to input the email address. Click 'OK' to save changes. 

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

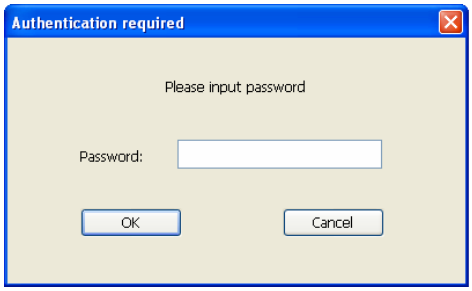
Edit	Select an email address from 'Recipient E-Mail Address' box, and click 'Edit' to edit the email address.
Delete	Delete selected email address.
Sender E-Mail Address	Specify the email address of email sender.
SMTP Server	Specify the IP address or host name of the SMTP server you wish to use. For most of ISPs they will only allow its subscriber to use their SMTP server, if you don't know which SMTP server you should use, please refer to the setting of your email software or ask your ISP / network administrator.
SMTP port	Specify the port number of the SMTP server you wish to use here. By default (and the setting of most of SMTP servers) it is '25'.
SMTP Auth	Select 'Enable' if your SMTP server requires authentication, select 'Disable' if it's not required. If you don't know if your SMTP server requires authentication, please refer to the setting of your email software or ask your ISP / network administrator.
SMTP Account	Input the SMTP account (username) of your SMTP server here. In most cases, it's the same as your POP3 username (the one you use to receive email). Please refer to the setting of your email software or ask your ISP / network administrator if you're not sure about this.
SMTP Password	Input the SMTP password of your SMTP server here. In most cases, it's the same with your POP3 password (the one you used to receive email). Please refer to the setting of your email software or ask your ISP / network administrator if you're not sure about this.
SMTP SSL/TLS	If your email server requires SSL encryption, select SSL or TLS options available in the list.
OK	Save settings in this tab.
Cancel	Discard all changes done in this tab.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

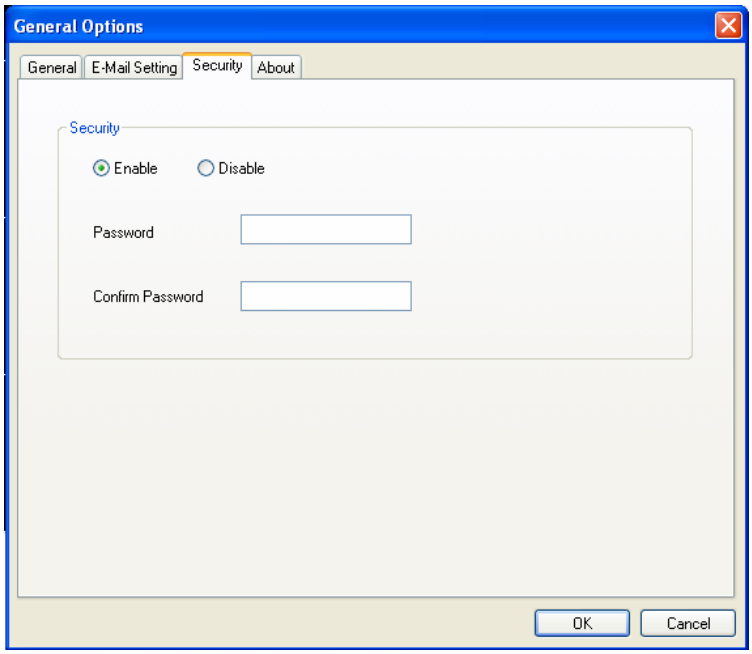
3.3.2.3 Security

If you don't want other people to access the SKYROS Surveillance Manager software, you can set a password to protect it.

You'll need to input the password every time you wish to use the SKYROS Surveillance Manager software:



To set password, please use 'Security' tab in 'General Options' menu:



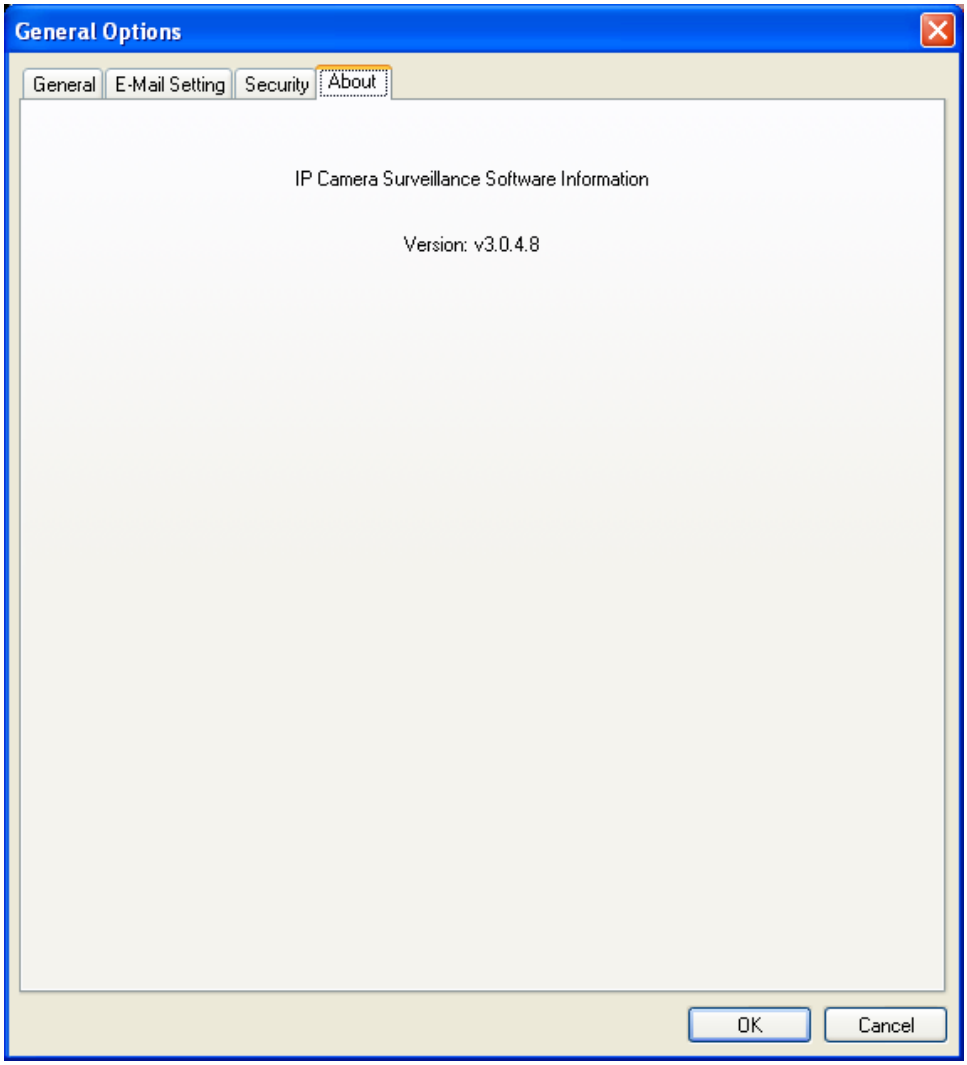
The settings are described below:

Item	Description
Enable	Requires password authentication when this software starts.
Disable	Password authentication is not required when this software starts.
Password	Input the password you wish to use here.
Confirm Password	Input the password you wish to use here again.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

3.3.2.4 About

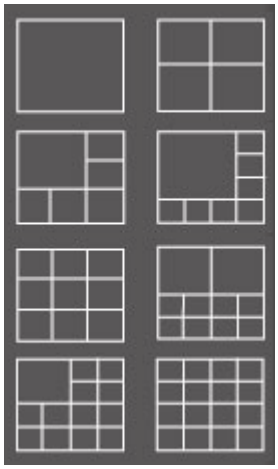
This tab shows the version number of the IP camera surveillance software you're using.



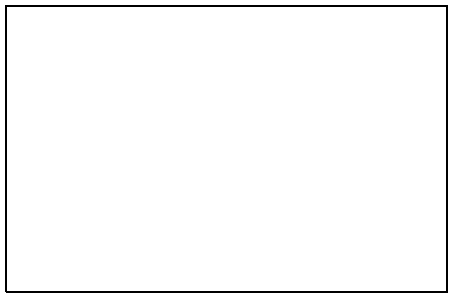
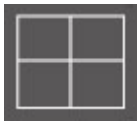
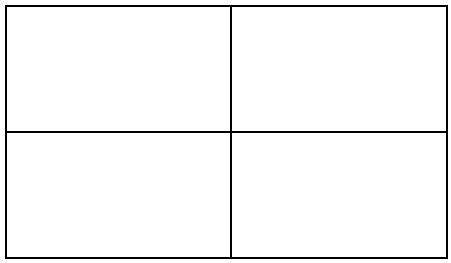
☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

3.4 Change Display Layout

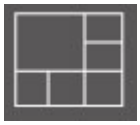
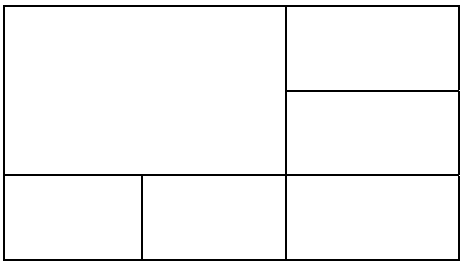
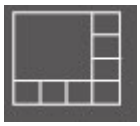
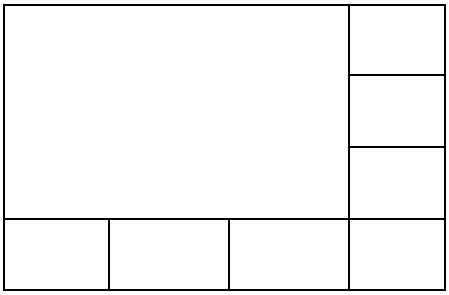
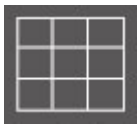
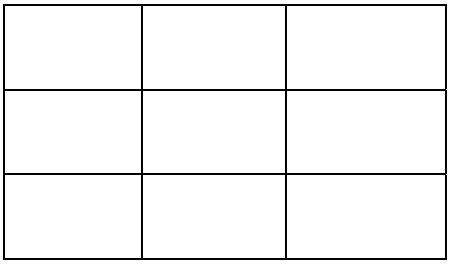
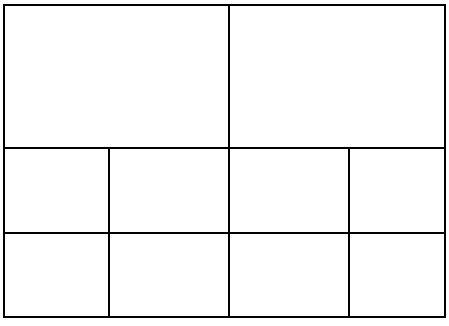
This IP camera surveillance software provides 8 kinds of display layout:



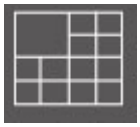
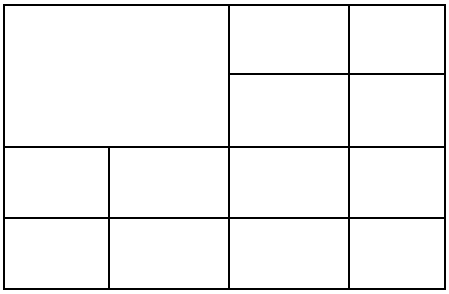
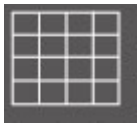
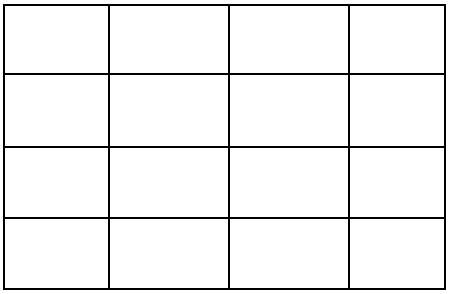
Each layout displays different number of cameras and camera arrangement, you can click the icon that presents a specific kind of layout, and the video display area will change accordingly.

Layout style 1: 1 Camera only	Displays the video of 1 camera only. 
Layout style 2: 4 Cameras 	Displays the video of up to 4 cameras. 

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

Layout style 3: 6 Cameras 	Displays the video of up to 6 cameras. 
Layout style 4: 8 Cameras 	Displays the video of up to 8 cameras. 
Layout style 5: 9 Cameras 	Displays the video of up to 9 cameras. 
Layout style 6: 10 Cameras	Displays the video of up to 10 cameras. 

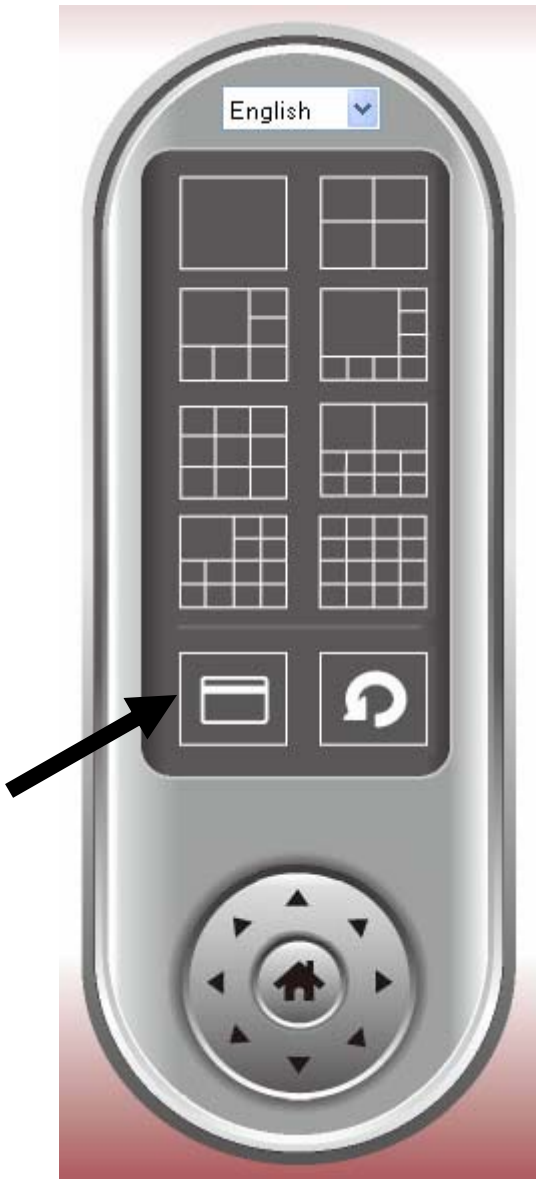
☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

Layout style 7: 13 Cameras 	Displays the video of up to 13 cameras. 
Layout style 8: 16 Cameras 	Displays the video of up to 16 cameras. 

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

3.5 Full-screen mode

If you want to use all available spaces on your monitor to display surveillance image, you can click ‘Full Screen’ button to switch to full-screen mode.



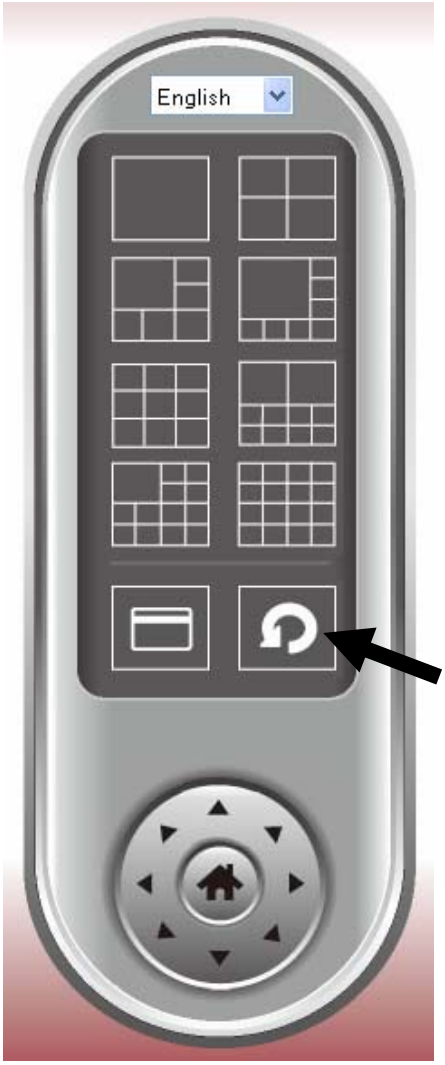
To exit full-screen mode, press ‘ESC’ key.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

3.6 Scan

If you have more than one camera configured, and you wish to switch the displaying image between cameras, you can click ‘Scan’ button to switch between all configured cameras.

NOTE: If a camera is configured but disconnected, it will still be displayed in a scan sequence (you’ll see nothing and you’ll see ‘Disconnected’ text displayed at the upper-left corner of display image).



Click ‘Scan’ button once to activate scan function (scan icon will become blue), click again to stop scanning (scan icon will become white).

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

3.7 PTZ

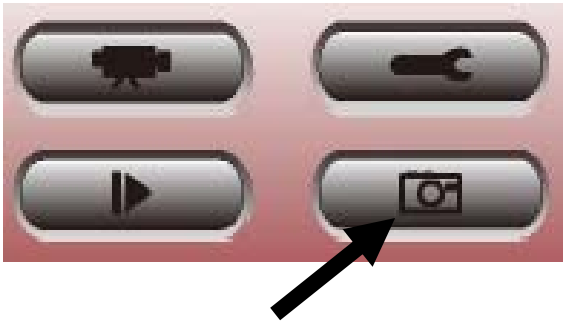
For cameras that support pan - tilt function, you can change the position that camera points to, to see different places that fall in the scope of camera's view.

Please select a camera in video displaying area by clicking on its image, and then click the directions you wish the camera to move to (total 8 directions available). Click 'Home' button ( ) to return to camera's home (default) position.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

3.8 Snapshot

You can take a snapshot of selected camera and save it to ‘Snapshot’ sub-folder of pre-defined data directory.



Click snapshot button once to take a snapshot; you can take as much snapshot as you want before hard disk is full.

3.9 Recording

You can start video recording of selected camera manually by clicking ‘Start Recording’ button:

When recording starts, you’ll see a message displayed in message displaying box like ‘1/1 10:00:00, Camera 1 Start Manual’, which means camera 1 starts recording manually on 1/1 at 10:00:00.

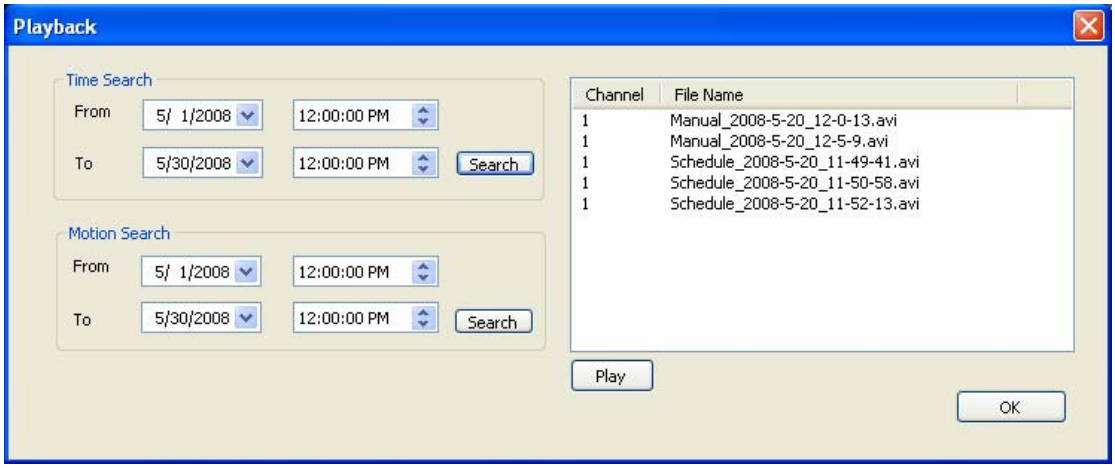
To stop recording, click ‘Start Recording’ button again, and you’ll see a message displayed in message displaying box like ‘1/1 10:00:00, Camera 1 Stop Manual’.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

3.10 Video Playback

You can playback all recorded video by clicking this button.

A new window will appear:



You have to search the video file before you can play it. There are two kinds of video search: Time Search (search all video files that fall in a specific period of time) and Motion Search (search all videos recorded by motion detection function and fall in a specific period of time).

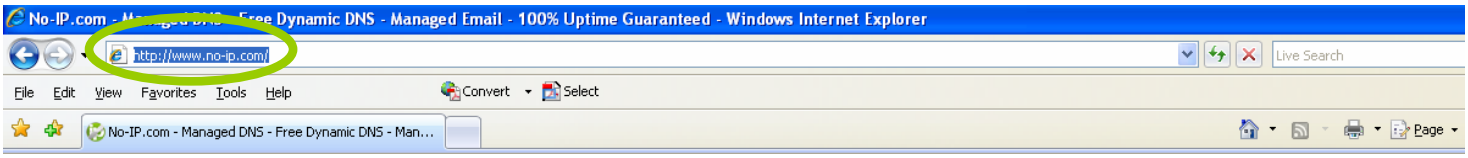
Please define the start and end date / time of the time period you wish to search, and then click ‘Search’ button (of ‘Time Search’ / ‘Motion’ Search’). All found videos will be displayed, select the video you wish to play and click ‘Play’ button to playback.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

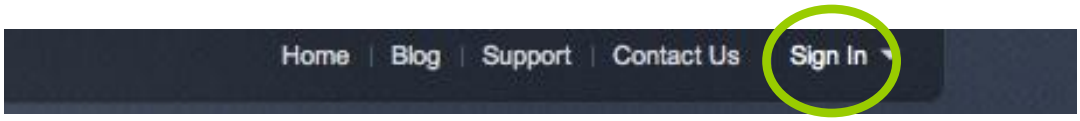
4. Obtaining a free No-IP account

If your ISP provides dynamic (non-static) IP address to you and you cannot connect to your IP camera when you're away from it, here are a few simple steps to follow to get yourself setup and online with No-IP.com's free dynamic DNS service, so you can run your servers at your home or business without a static IP address.

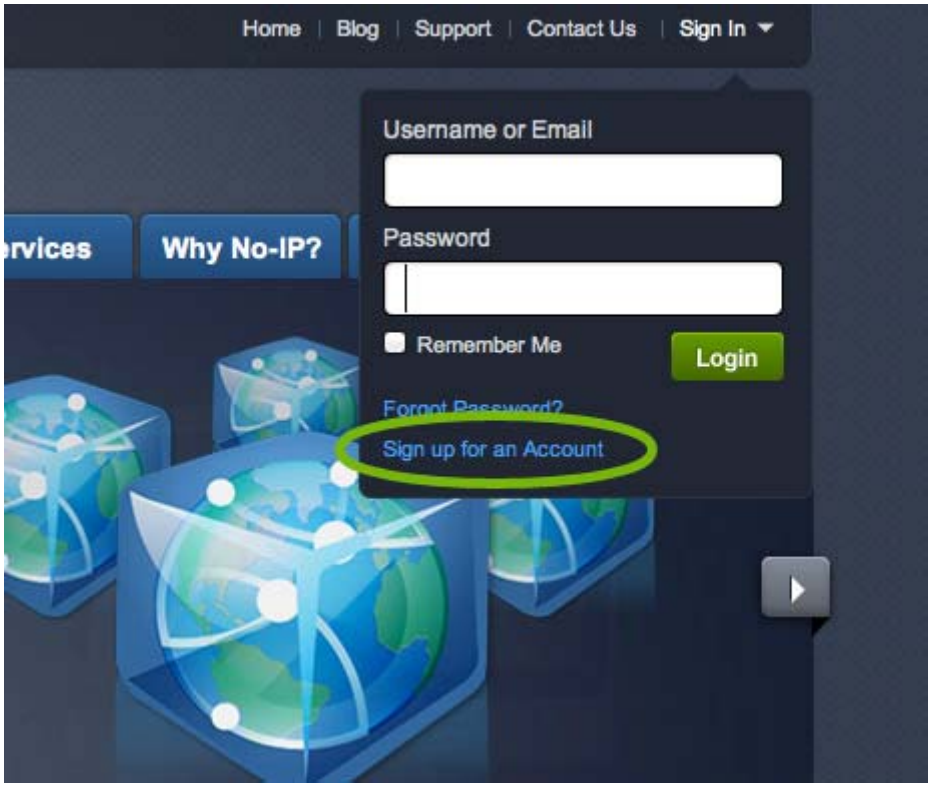
1. Launch your web browser and navigate to http://www.no-ip.com


Dynamic DNS - Managed Email - 100% Uptime Guaranteed - Windows Internet Explorer
http://www.no-ip.com/
Live Search
File Edit View Favorites Tools Help
Convert
Select
No-IP.com - Managed DNS - Free Dynamic DNS - Man...
Page

2. Click the "Sign-in!" link (located at the top of the page of no-ip.com's webpage)



3. Click 'Sign up for an Account' in pop-up menu.

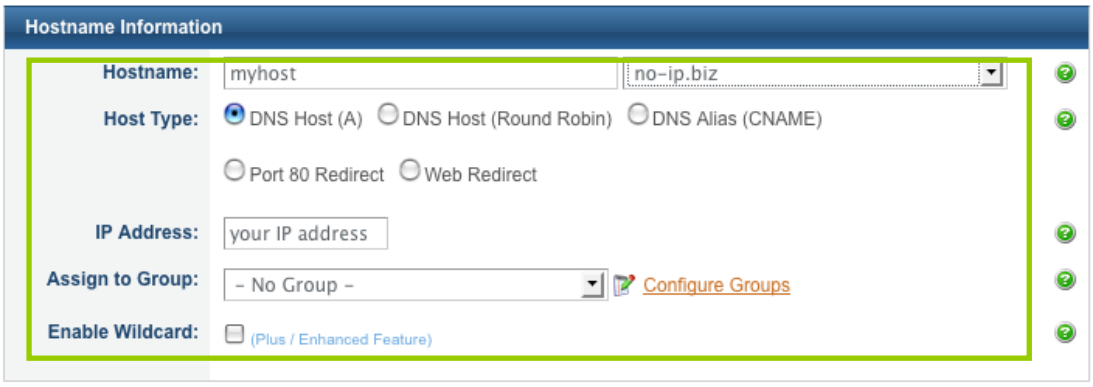


1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

4. You should now be logged into the No-IP.com members section. Here you can create a hostname that you will use to connect to your server.
   A hostname is used instead of your IP address whenever you want to connect to a service at your location. Hostnames take the form of hostname.domain.com so they're the same as names used in URLs to surf the web etc.

In order to add a host to your account, select the "Add Host" link from the "Hosts/Redirects" menu. This will bring up the Add a Host page.

5. Now you're ready to fill in the details of your new hostname. Here are the steps to deal with the items on this screen:



Fill in the Hostname: box with a name of your choosing. It can be anything you like. If you choose a name that's already in use, an error will be generated and you can then try a different hostname.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

• No-IP Free users are only able to create hostnames on one domain. If you want more domain choices, consider upgrading to No-IP Enhanced which offers 80+ domains.

• Choose the Host Type. The default choice, DNS Host A, is usually the correct one. Do not choose any of the other host types unless you're trying to solve a particular problem that a DNS A record won't accommodate. If your ISP blocks Port 80 for example, and you're trying to run a web server or other service on port 80, then you can choose Port 80 Redirect (at that point you'll be asked to specify the port to use for the redirection). If you're not running a web server, then do not choose this option as it will likely prevent you from connecting properly.

• In the field marked IP Address: you should already see your current IP address. If you wish to set the IP address of the host to be somewhere other than your current location, you can enter that address now.

• The next two options aren't used for a basic account setup so we won't concern ourselves with those in this article.

• When you have filled in the information for your new hostname, simply click the "Create Host" button at the bottom of the page to save it.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

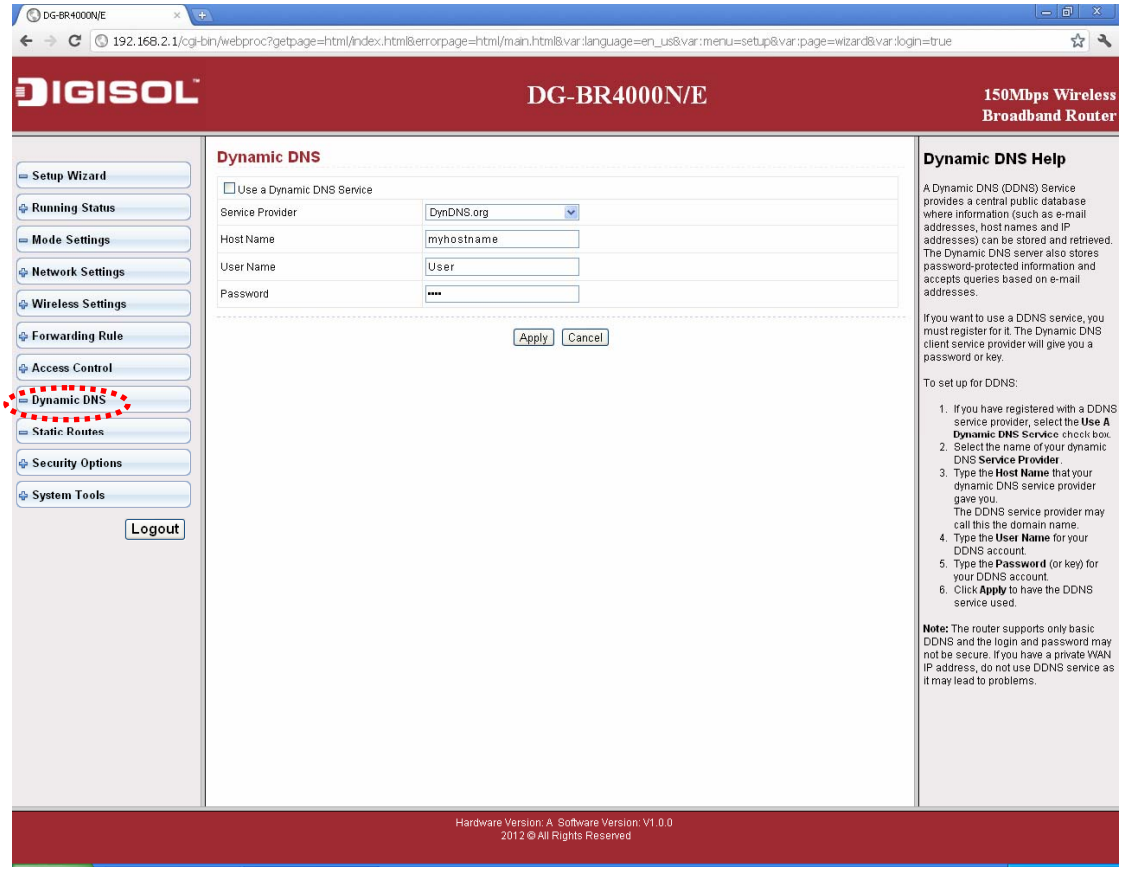
5. IP Camera behind a router/firewall – Sample Configuration

If this IPCAM is not directly connected to Internet (behind router or firewall), you'll need to setup your router / firewall so you can access this IPCAM from other computers on Internet.

The following instructions describe how to configure your router or firewall device so that IPCAM can work with them. These instructions are based on a commonly-available residential router and these setup techniques should be easy to apply on any other similar devices as well.

5.1 Setup Dyndns Dynamic IP address Mapping

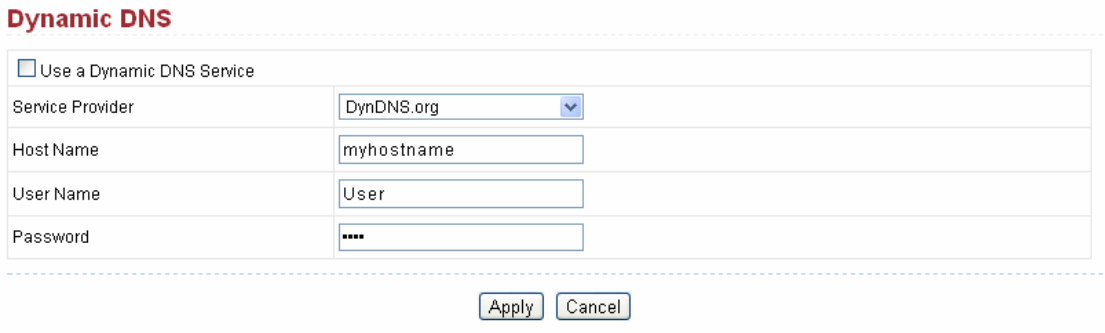
1. Go to your router's setup page, and locate 'DDNS', 'Dynamic DNS', or similar setup items.


DG-BR4000N/E
192.168.2.1/cgi-bin/webproc?getpage=html/index.html&errorpage=html/main.html&var:language=en_us&var:menu=setup&var:page=wizard&var:login=true
DIGISOL
DG-BR4000N/E
150Mbps Wireless Broadband Router
Setup Wizard
Running Status
Mode Settings
Network Settings
Wireless Settings
Forwarding Rule
Access Control
Dynamic DNS
Static Routes
Security Options
System Tools
Logout
Dynamic DNS
Use a Dynamic DNS Service
Service Provider
DynDNS.org
Host Name
myhostname
User Name
User
Password
Apply
Cancel
Dynamic DNS Help
A Dynamic DNS (DDNS) Service provides a central public database where information (such as e-mail addresses, host names and IP addresses) can be stored and retrieved. The Dynamic DNS server also stores password-protected information and accepts queries based on e-mail addresses.
If you want to use a DDNS service, you must register for it. The Dynamic DNS client service provider will give you a password or key.
To set up for DDNS:
1. If you have registered with a DDNS service provider, select the Use A Dynamic DNS Service check box.
2. Select the name of your dynamic DNS Service Provider.
3. Type the Host Name that your dynamic DNS service provider gave you.
The DDNS service provider may call this the domain name.
4. Type the User Name for your DDNS account.
5. Type the Password (or key) for your DDNS account.
6. Click Apply to have the DDNS service used.
Note: The router supports only basic DDNS and the login and password may not be secure. If you have a private WAN IP address, do not use DDNS service as it may lead to problems.
Hardware Version: A Software Version: V1.0.0
2012 © All Rights Reserved

2. Refer to last chapter (Sec 4) and obtain a Dyndns account, password, and domain name.

1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

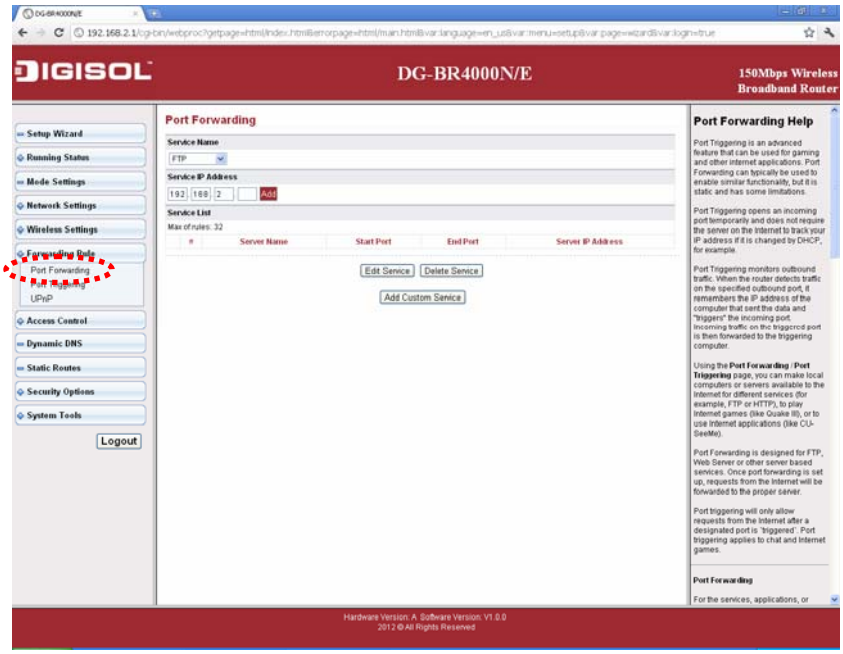
3. Enable Dynamic DNS function, select ‘DynDNS’ as service provider, and fill the information you obtained from Dyndns.org into Domain name, Account and Password field (these field names may differ on your router).



5.2 Open Ports Required by IP CAM

1. To access IP CAM located behind router or firewall, you must open ports on router or firewall so you can access IP CAM from Internet.

2. Go to your router’s setup page, and locate ‘NAT’, ‘Firewall’, ‘Port Mapping’, ‘Port Forwarding’, or similar setup items.



3. Enable this function, and fill IP CAM’s IP address in ‘Private IP’ (or similar field), select ‘TCP’ or ‘BOTH’ as data type, and input these port numbers given below for the services you wish to access from Internet in the port range field.

   IP CAM web configuration and view live image: 80

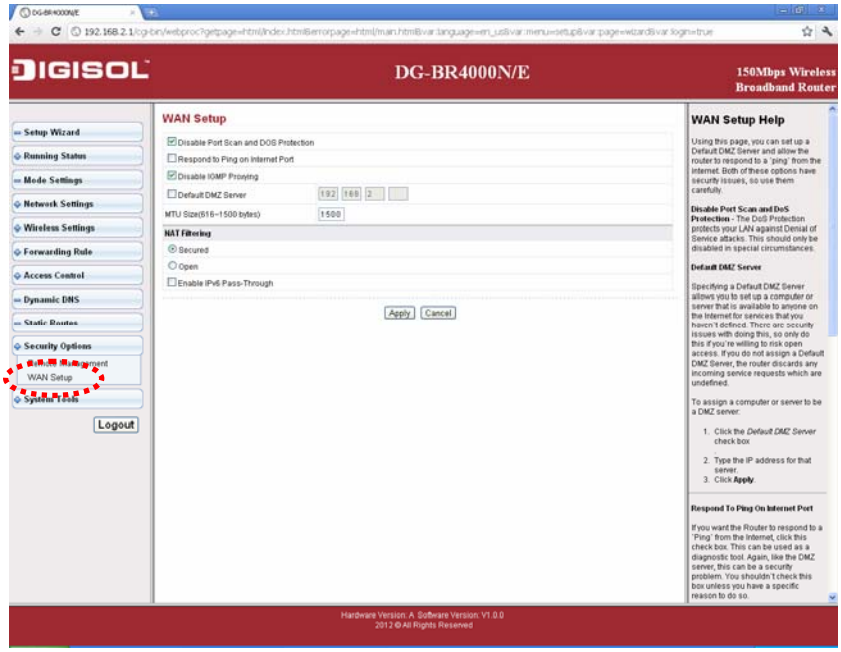
   RTSP: 554 and 50000 to 60000

   Please note that if you changed the port number of web configuration / view or RTSP, you have to change the port forwarding setting for your router accordingly.

1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

5.3 DMZ Settings

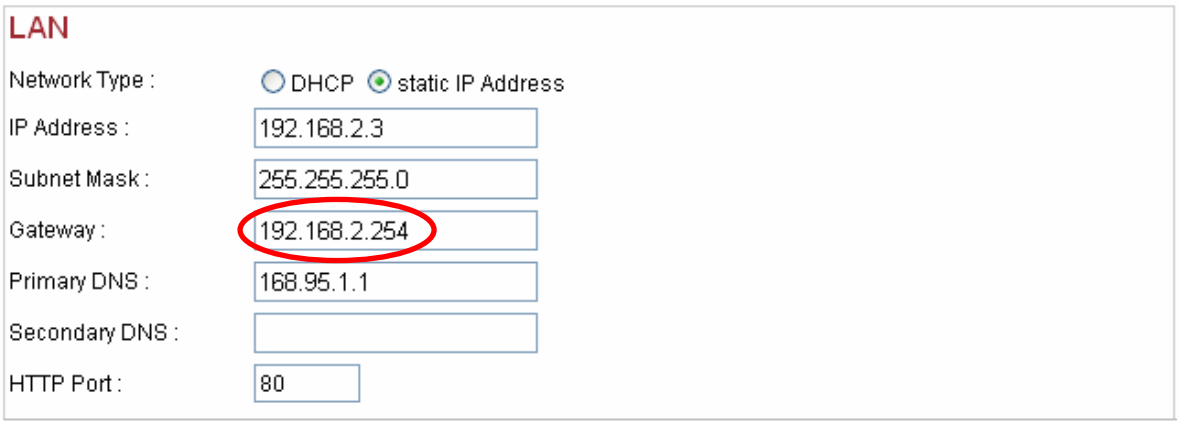
1. If IP CAM is the only service you wish to access from Internet, you can also use ‘DMZ’ function to access IP CAM:



Simply put the IP address of IP CAM in Static IP field and you can access IP CAM from the IP address of your router directly.

Corresponding settings on the IP camera for section 4.4:

In the IP CAM enter the IP address of the router in the gateway field (shown below). Ensure that the router and IP Camera are in the same subnet.



1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

6 Using Cellphone as Image Viewer

You can use your cellphone to connect to this IP CAM and view captured image. Currently this IP CAM supports iPhone (Apple) and Google Android OS.

6.1 iPhone

1. Launch Safari web browser

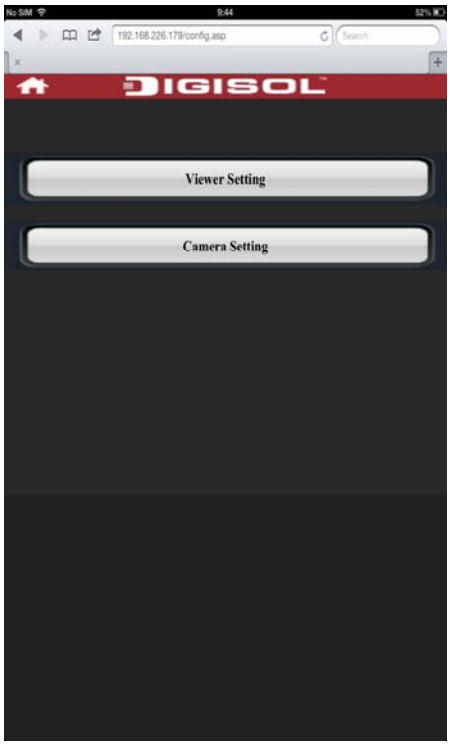
2. Input IP CAM's IP address / host name in safari's address bar in the following format:
   111.222.333.444/ipcam.asp or hostname/ipcam.asp
   Please note that appending '/ipcam.asp' is required.

1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

3. Input username / password to login.

4. You'll see the image of connected camera displayed on upper-left corner of quad-split screen. If you have more than one IP CAM, you can add other 3 IP CAMs to the quad-split screen. Click an unused corner and a yellow square will appear to indicate it's being marked, then click 'Setting'.

5. Click ‘Camera Setting’.



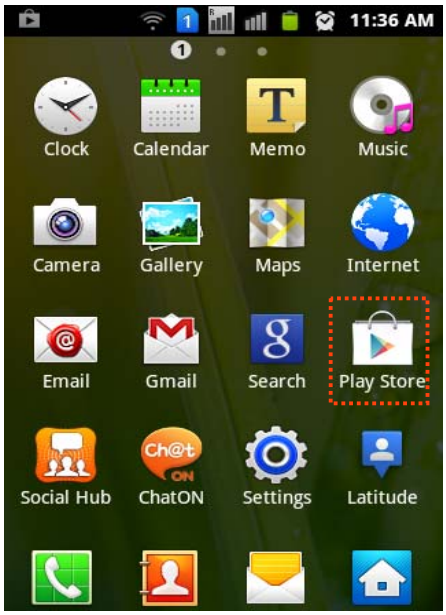
6. Input camera’s name, IP address, port number, username and password in respective field, then click ‘Done’. Please note that these fields are case-sensitive. You can click ‘Preview’ to check connection.

1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

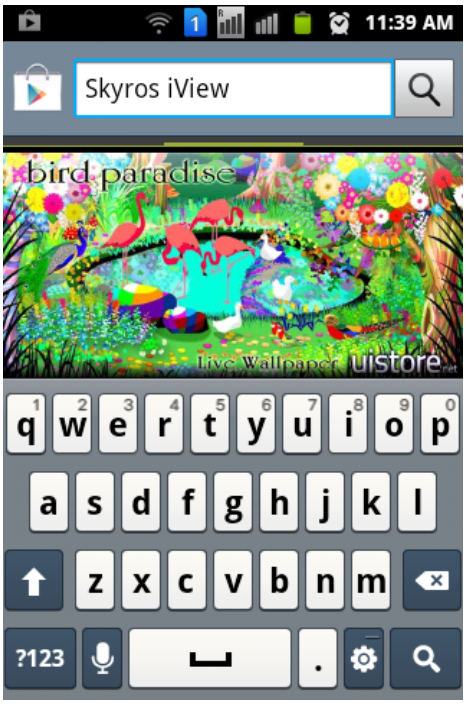
6.2 Skyros iView application for Android devices

To Install Skyros iView IP camera utility on Android device, follow the below mentioned instructions:

Step1: To install Skyros iView application, launch 'Market/ Play Store'. (In your Android device's 'All apps' menu:

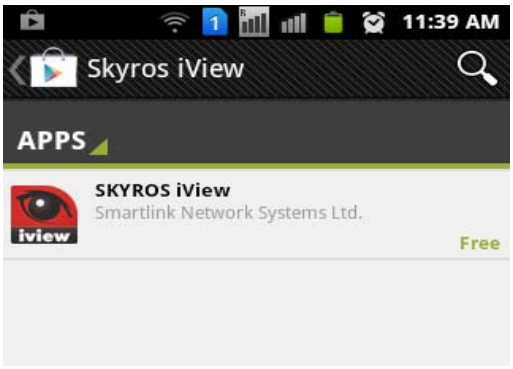


Step2: Click magnifier icon at upper-right corner of Android market, and input 'Skyros iView' in search field.

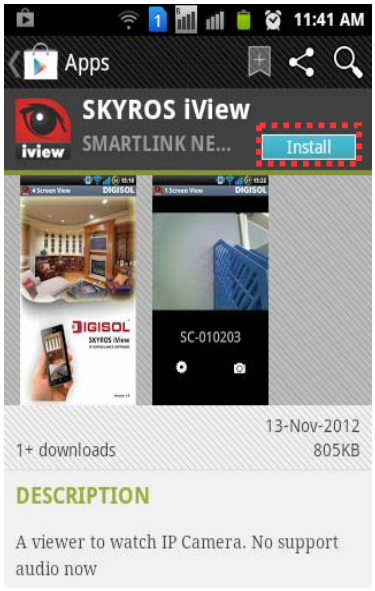


1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

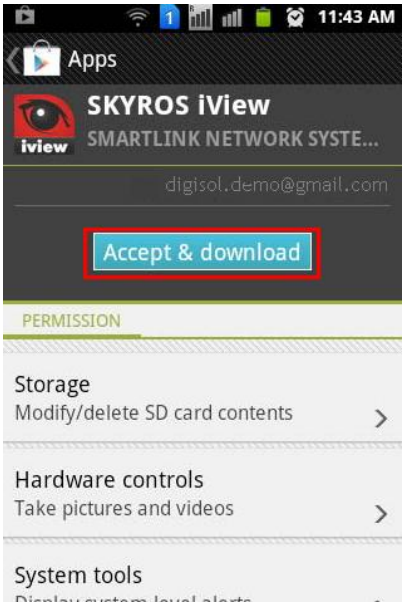
Step3: You should be able to find Skyros iView utility (If not, please check spelling).



Click on that application to download & install Skyros iView:

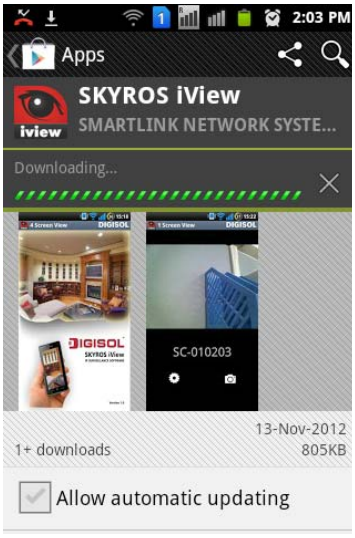


Step4: Once you click 'install', Android will prompt you to confirm installation, please click 'Accept & Download' button below to start installation:

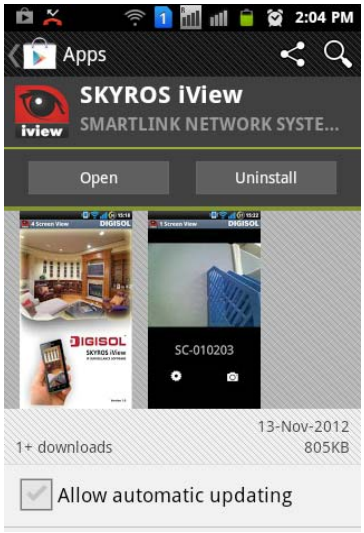


1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

Step5: Please be patient while installing Skyros iView Application.



Step6: Once the application is installed, click on 'Open' to launch the Skyros iView utility or you can launch it later.

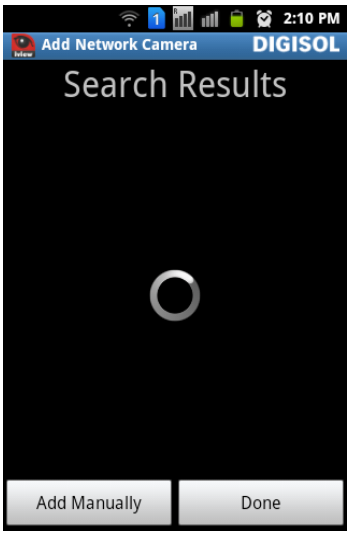


Step7: 'Skyros iView' icon will appear in 'All Applications'.

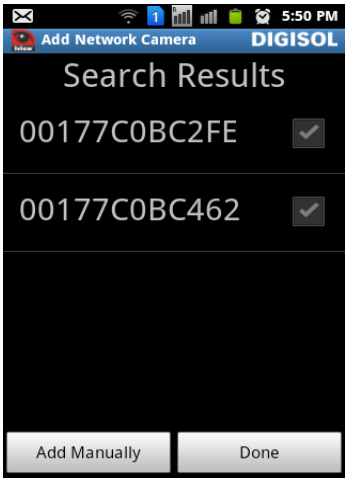
1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

You can launch the utility by clicking on this icon.

Step8: Once you launch Skyros iView, it will search for all Digisol IP cameras on your network.

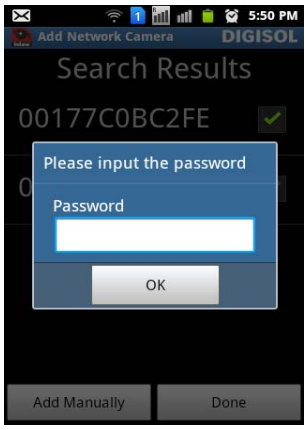


Step 9: Make sure you're connected to same wireless access point to which you have connected the Digisol IP cameras.

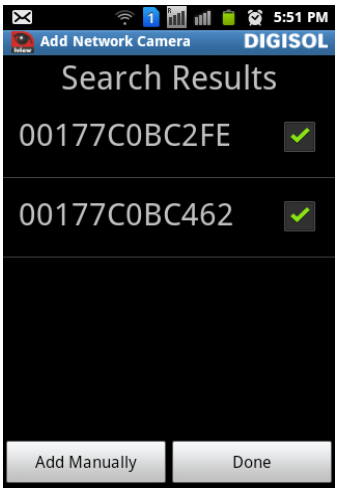


1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

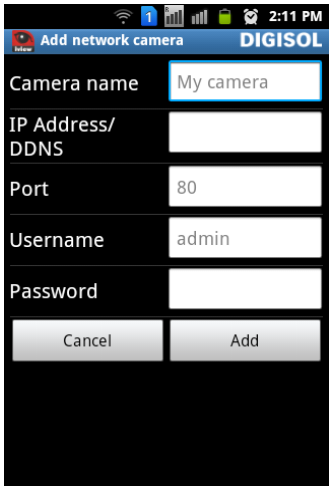
Once the IP cameras are detected on Auto-discovery, select the IP camera. It will prompt you to input the IP camera password.



After entering the password, click on OK. Similarly add the other IP cameras. You will see a green check mark against the added IP cameras.



Step 10: If you want to add a Digisol IP camera on Internet, please click 'Add Manually' button to abort and setup IP camera manually.



In this page, you can input IP camera's parameters manually:

Camera Name: You can define a name for this IP camera to help you to remember the location of this IP camera.

IP Address/ DDNS: Here, you can enter the IP Address details of an IP camera or you can enter the DDNS URL of an IP camera if any.

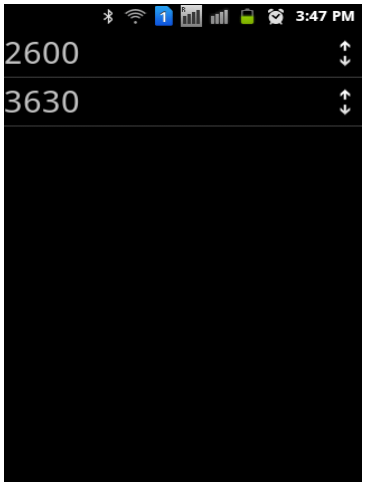
Port: Enter the HTTP port of an IP camera. Default port is 80.

User Name: Input the user name of IP camera. Default user name is 'admin'

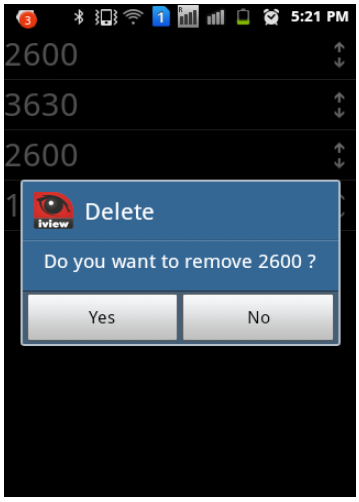
Password: Input the password of IP camera. Default password is '1234'

Click 'Add' to add a new IP camera with parameters listed above.

When an IP camera has been added successfully, it will be listed under Settings tab.



To remove/ delete an IP camera, click the desired model & keep it pressed. It will prompt you a message as shown below:-



Please repeat last step to add more IP cameras you wish to connect. To repeat last step, press the menu key in the Live interface of this application & click on Add/ Search button.

Step 11: To configure IP camera's parameters, click on the desired model, it will prompt you the network settings page, here you can edit/ modify the current settings of an IP camera.

1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

Step 12: To change the sequence of live view of an IP camera, you can click icon.

You can view 4 cameras at a time using this application. To view a particular camera in full screen, click on that camera view.

Three icons will be displayed on the bottom of the image.

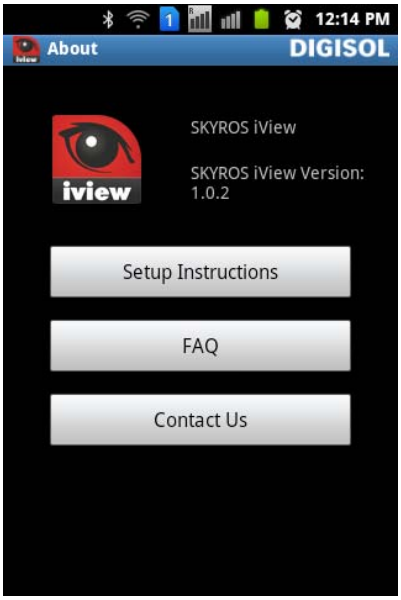
: Here, you can set the brightness, saturation & sharpness values of an IP camera to improve the image quality.

: Click this icon to capture the snapshot of current view of an IP camera. You will see 'Save Snapshot' message appear, that indicates a snapshot has been taken.

: This icon will be highlighted if the connected IP camera supports Pan/Tilt. You can click this icon and this symbol will appear on the video display of an IP camera. Use your finger to slide on the live image to the direction you wish to move.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

Step 13: You can view the current version of Skyros iView under About tab.



Note: If you slide from top to bottom on the video display screen, it shows a single view. If you slide twice, it shows a two screen view. If you slide for third time, it shows a quad view in the application.

1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

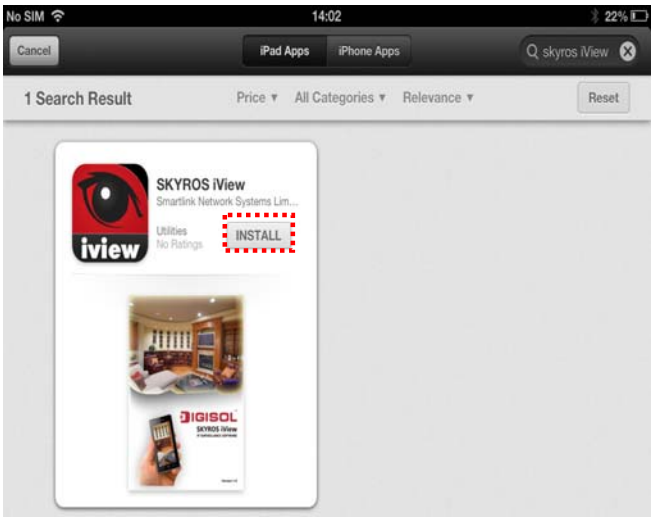
6.3 Skyros iView application for iPhone/ iPad

To Install Skyros iView IP camera utility on Apple device, follow the below mentioned instructions:

Step1: To install Skyros iView application, launch ‘App Store’.

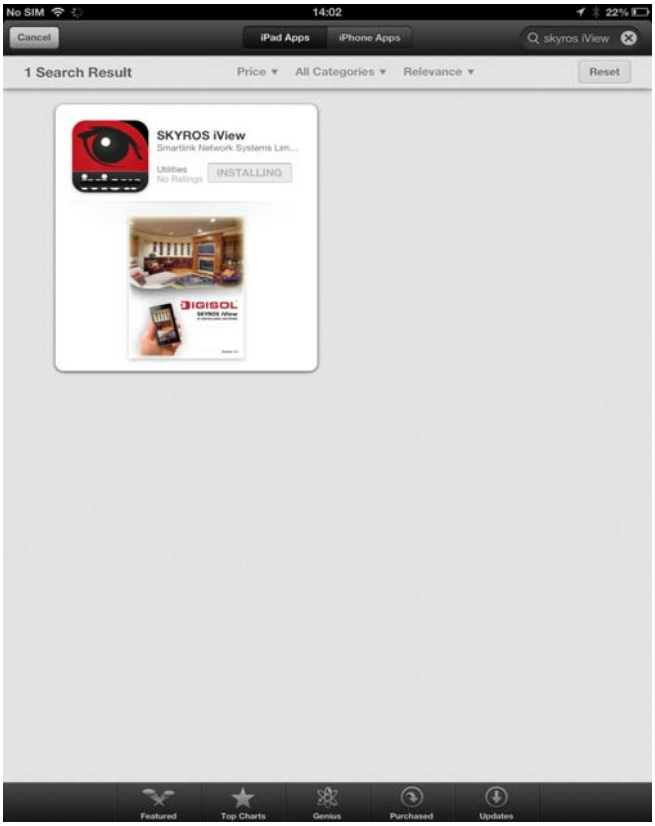
Step2: Click magnifier icon at upper-right corner of App Store, and input ‘Skyros iView’ in search field.

Step3: You should be able to find Skyros iView utility (If not, please check spelling).



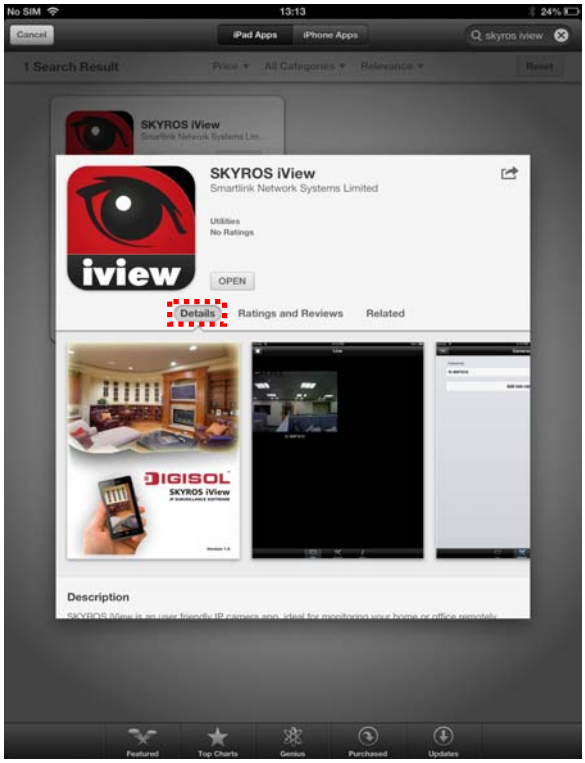
Click on 'Install' to download the Skyros iView:

Step4: Please be patient while installing Skyros iView Application.



1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

Step5: Once the application is installed, click on 'Open' to launch the Skyros iView utility or you can launch it later.



Step6: 'Skyros iView' icon will appear in 'Home page' of iPhone/ iPad.

1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

You can launch the utility by clicking on this icon.

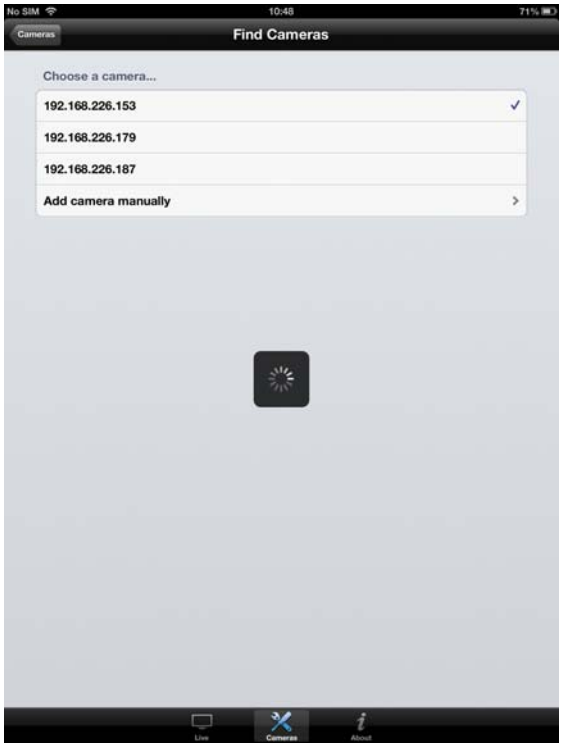
Step7: Click on Add New Camera tab to search for Digisol IP cameras.

Step 8: Make sure you're connected to the same wireless access point to which you have connected the Digisol IP cameras.

Once the IP cameras are detected on Auto-discovery, select the IP camera. It will prompt you to input the IP camera password.

1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

After entering the password, click on OK. Similarly add the other IP cameras. You will see a check mark against the added IP cameras.



Step 9: If you want to add a Digisol IP camera on Internet, please click 'Add camera manually' button to abort and setup IP camera manually.

In this page, you can input the IP camera parameters manually:

Camera Name: You can define a name for this IP camera to help you to remember the location of this IP camera.

IP: Here, you can enter the IP Address details of an IP camera.

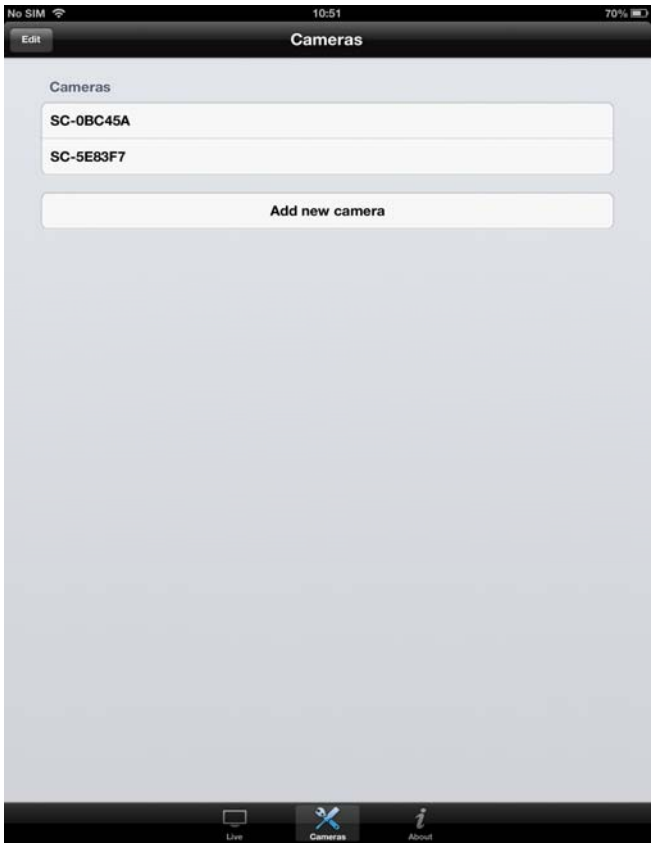
Port: Enter the HTTP port of an IP camera. Default port is 80.

User Name: Input the user name of IP camera. Default user name is ‘admin’

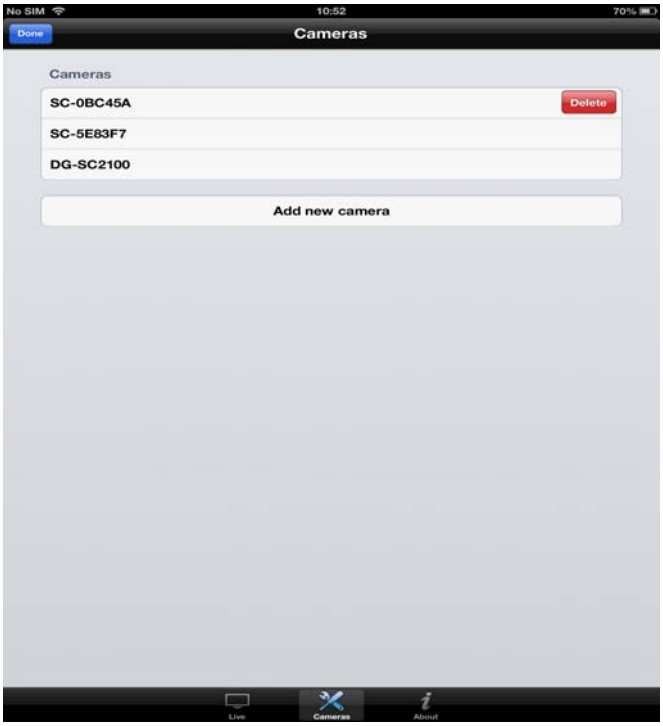
Password: Input the password of IP camera. Default password is ‘1234’

Click ‘Done’ to add a new IP camera with parameters listed above.

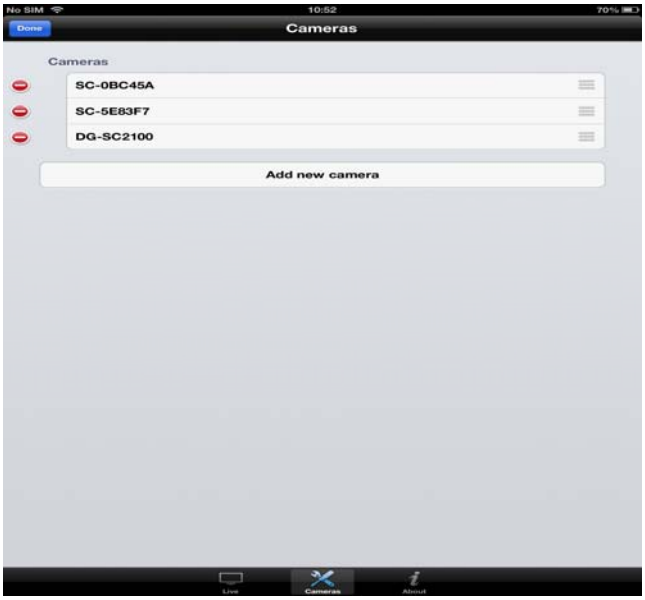
When an IP camera has been added successfully, it will be listed under Cameras tab.



To remove/ delete an IP camera, slide the desired model. It will display ‘delete’ button.



You can also click Edit tab on the upper left corner under Cameras tab to remove/ delete the IP cameras:-



Please repeat the above steps to add more IP cameras you wish to connect. Press the cameras tab in the main interface of this application to add the IP cameras.

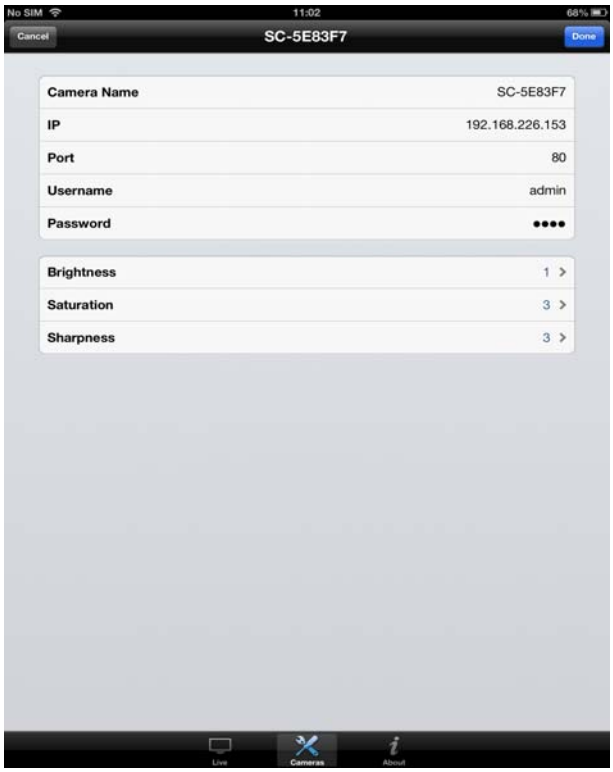
Three icons will be displayed at the bottom of the image.

: Here, you can view the live view of all 4 IP cameras.

: Here, you can add/ delete the IP cameras. Also, you can edit/ modify the settings of IP cameras under this tab.

: Here, you can view the current version of Skyros iView.

Step 10: To configure IP camera's parameters, click on the desired model, it will prompt you the settings page, here you can edit/ modify the current settings of an IP camera:-



You can view 4 cameras at a time using this application. To view a particular camera in full screen, click on that camera view.

: Click this icon to capture the snapshot of current view of an IP camera. You will see ‘Save Snapshot’ message appears, that indicates a snapshot been taken.

: Click this option to view the full screen video of an IP camera.

: These dots indicate the no of added cameras. If you click those dots, it will switch the IP camera view.

For Pan/ Tilt IP cameras, Switch tab will be highlighted on the upper right corner of the video as seen in the above screen.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

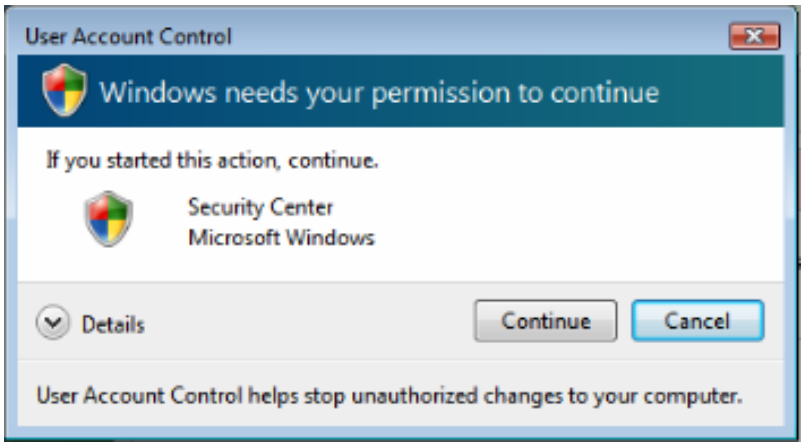
Once you click this button, Gesture tab will be highlighted on the video display of an IP camera. Use your finger to slide on the live image to the direction you wish to move.

Click on the icon, to return back to the Live page.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

7. Windows Vista / Windows 7 UAC Configuration

When you attempt to save a snapshot or record video file, you will see UAC (User Account Control) pop-up notification window to restrict you from saving file like below:



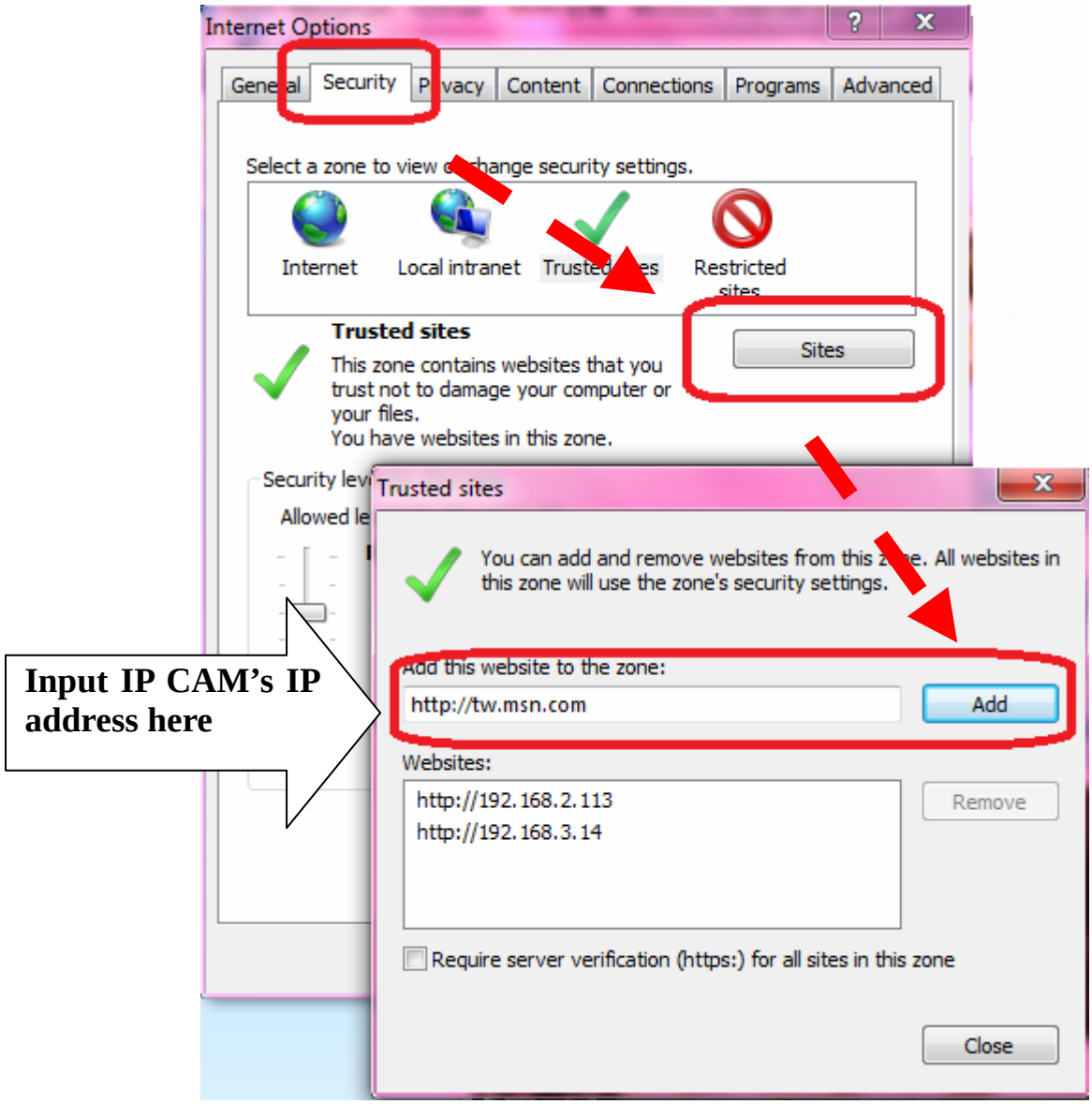
To avoid this from happening, you can:

a. Switch UAC off in control panel **(NOT RECOMMENDED)**

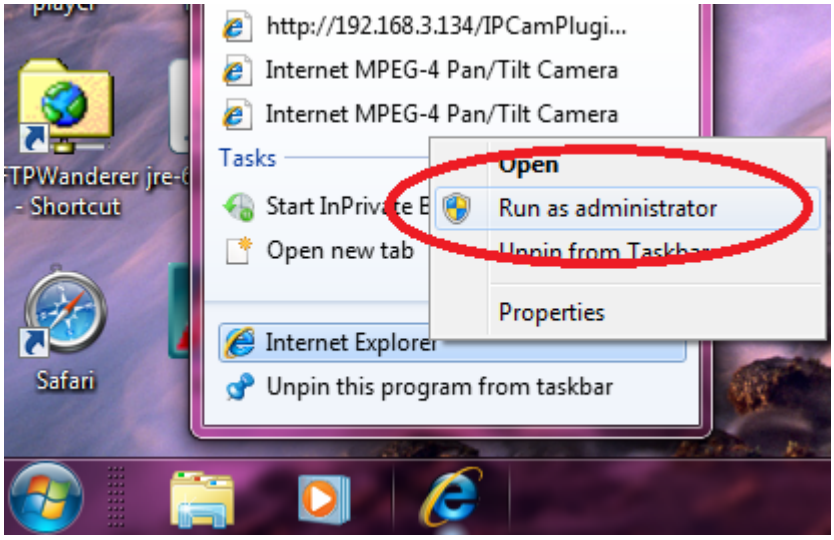
b. Select a lower security level in Internet Explorer's security setting **(NOT RECOMMENDED)**

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

c. Add IP Camera's IP address to 'Trusted sites' in Internet Explorer's security setting (RECOMMENDED)



d. If you don't want to change Internet explorer's security setting, you can run Internet explorer as administrator as workaround.



☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

8 Appendix

8.1 Specifications

- Max Resolution: 1280 x 1024 pixels
- Sensor: 1.3Mega pixels 1/4" color CMOS sensor
- Gain control: Automatic
- Exposure: Automatic
- White Balance: Automatic
- Power: 12V DC, 1A power adaptor

Image (Video Setting)

- Image compression: MJPEG/MPEG4/H.264 Image Video
- Frame rate: 10-15fps@SXGA, XGA, 30fps@QVGA, 20fps@VGA
- Video resolution: MJPG&H.264: 1280x1024, 640x480, 320x240
  MPEG4: 1024x768, 640x480, 320x240

System Hardware

- LAN Connector: One RJ-45 port to connect to 10/100Mbps Ethernet
- Wireless: IEEE 802.11b/g/n (Wireless Model Only)
- LED Indicator: LAN/WLAN/Power for wired and wireless model

Web GUI and SKYROS Manager Utility

- Includes easy-to-find and surveillance utility.
- Provides Web based Management.
- View multiple cameras simultaneously on PC with SKYROS surveillance manager software up to 16 cameras at a time.
- Supports 16 additional user accounts for viewing camera.
- Auto sending Snap Shot or video by E-mail.
- Support DDNS and UPnP functions.
- Supports Windows 2000/XP/Vista/Win7.
- Firmware Upgradeable.

Environment Requirements

The whole device can survive in a wide range of operating temperature and can work normally and stably in tough environment.

- Operating temperature: 0˚C—40˚C
- Relative humidity: 10%—90% (non-condensing)

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

Physical Characteristics

- Dimension (L x W x H): 115 x 80 x 46 mm (DG-SC2600)
  121 x 80 x 46 mm (DG-SC2600W)
- Weight: 150gms (DG-SC2600)
  155gms (DG-SC2600W)

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

8.2 Troubleshooting

If the IP camera is not working properly, before you contact the dealer of purchase for help, please check the troubleshooting list here, this may help you to solve the problem yourself and therefore saves your valuable time.

Scenario	Possible Solution
I cannot connect to the IP camera	a. Please make sure IP camera is correctly powered (the 'Power' LED should be on). b. Please confirm the IP address setting of the computer you're using. If the IP Camera and the laptop are not in the same subnet, they will not be able to communicate with each other. c. Please modify the IP address of the laptop to match the subnet of the IP camera. d. In case, the IP address of the IP camera is not known, reset it to factory default value (which is 192.168.2.3) by pressing 'reset' button on the IP camera. Press and hold reset button for 10 seconds, the IP Camera will reboot with default settings. e. If you're trying to connect to the IP camera from Internet, please make sure the port that IP camera uses (HTTP port, see section 2.3.1) is not blocked by firewall or other software / hardware. f. Contact DIGISOL helpdesk, if above solutions do not work.
Image refreshes very slowly	a. Try a higher frame rate setting, if it's not 30. b. Try a lower resolution. c. If you're connecting this camera from Internet, it could be caused by a slow Internet connection, and it's not a problem caused by camera. However, when the network connection is slow, you should use lower frame rate / resolution. d. Adjust the antenna if you're using wireless connection.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

	The antenna should be close to the computer / wireless access point. e. Try to adjust 'MTU' setting if you're using PPPoE to connect to Internet. Ask your ISP or network administrator for detailed instruction.
IP camera is not responding	a. Is the network cable or wireless connection disconnected? Please check it. b. Unplug the power adapter from the wall socket and plug it in again after 10 seconds, then try to connect to the IP camera again. c. If IP camera is correctly powered ('Power' LED is on), but you still cannot connect to the camera (when you're sure that IP address is correct, please contact dealer of purchase for help).
Image is fuzzy	a. Adjust the focus ring on the camera until the image becomes clear. b. Use a soft cloth to clean the lens on the camera. You can use moist cloth, but DO NOT use alcohol or other chemical solution. c. Try to adjust brightness setting. d. If there's any light source near the view/target area, switch it on and see if image looks better.
I set the IP camera to send image by Email or FTP, but nothing is received	a. If the image is sent by Email, please make sure it's not blocked by any anti-spam mechanism. b. Please make sure you have enough permission for FTP uploading (You can try this by clicking 'Upload a test file' button). c. Make sure the user name and / or password of SMTP server is correct, if your SMTP server requires authentication (You can try this by clicking 'Send a test Email' button). d. Please check log, if FTP upload or Email sending is failed, it will be logged, and this may give you some clue on how to solve the problem.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

	e. Change the threshold to a more sensitive setting.
Nothing is heard at the camera side when I use 'Speak to IPCam' function	An external speaker is required to playback the voice received at computer side.
My player can't play the recorded video or the video is played without voice.	Please make sure you have installed MPEG4 decoder, if not please download ffdshow, it's a free open application.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

8.3 Glossary

MJPEG: Motion JPEG or M-JPEG is a digital video sequence that is made up of a series of individual JPEG images. (JPEG stands for Joint Photographic Experts Group). The quality of the image is guaranteed, regardless of movement because the captured video is a series of separately compressed JPEG images that can be extracted individually. The compression level can be adjusted to control image quality and file size.

MPEG4: is a video and audio compression technology found in many IP network camera models. The MPEG4 compression standard aims to deliver superior image quality while optimizing bandwidth.

H.264: H.264 is the latest compression technology that significantly reduces the file size of high-quality video images. Offers higher video resolution than Motion JPEG or MPEG-4 at the same bit rate and bandwidth, or the same quality video at a lower bit rate.

WEP (Wired Equivalent Privacy): A wireless security protocol, specified in the IEEE 802.11 standard, which is designed to provide a wireless local area network (WLAN) with a level of security and privacy comparable to that usually expected of a wired LAN.

WPA (Wi-Fi Protected Access): is a data encryption specification for 802.11 wireless networks that replaces the weaker WEP. It is the most advanced encryption method since it uses dynamic keys, Extensible Authentication Protocol to secure enterprise network access, and an encryption method called Temporal Key Integrity Protocol (TKIP) to secure data transmissions.

PPPoE (Point-to-Point Protocol over Ethernet): Is a network protocol for encapsulating Point-to-Point Protocol (PPP) frames inside Ethernet frames.

TCP / IP (Transmission Control Protocol/ Internet Protocol): TCP is used along with the Internet Protocol (IP) to transmit data as packets between computers over the network. TCP is a connection-oriented protocol, which means that a connection is established between the two end-points and is maintained until the data has been successfully exchanged between the communicating applications.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

DDNS (Dynamic DNS): Used to create a fixed domain name for dynamic internet ip address. A domain name is a meaningful and easy-to-remember name for an Internet address. Normally used when the ISP has provided you with dynamic internet ip address to access the camera remotely.

SMTP (Simple Mail Transfer Protocol): SMTP is used for sending and receiving e-mail. SMTP authentication is an extension of SMTP, whereby the client is required to log into the mail server before or during the sending of email. It can be used to allow legitimate users to send email while denying the service to unauthorized users, such as spammers.

FTP (File Transfer Protocol): FTP is an application protocol that uses the TCP/IP protocols, used to exchange files between computers/devices on networks. Network cameras with embedded operating systems use FTP to send camera images to an authorized user's computer or web site.

UPnP (Universal Plug & Play): A set of computer network protocols that allow the automatic peer-to-peer detection of devices on the network. Allows the discovery of UPnP- enabled devices in a network environment.

RTSP (Real Time Streaming protocol): RTSP is a control protocol for Internet streaming of audio and video. Mostly used for remote viewing of live or stored security camera video over the Internet. RTSP can be considered as a "remote control" for controlling the media stream delivered by a media server. RTSP servers typically use RTP as the protocol for the actual transport of audio/video data.

CMOS Sensor (Complimentary metal-oxide semiconductor): Is an image sensor available in many IP network cameras with less circuitry hence consumes less power, produces higher frame rate & is less costly as compared to CCD sensors.

IR LED (Infrared LED): Infrared radiation is radiation at a longer wavelength than visible light, which means it cannot be seen by the naked eye. These cameras are well suited for surveillance of low light areas or areas with no light at all. Infrared LED's surround the lens and shine infrared light, illuminating the scene.

Pan/Tilt: IP cameras with panning capabilities can move back and forth horizontally in order to monitor wider areas. In many cases a camera's panning functionality can be controlled remotely from network PC using video management software. Tilt refers to an IP camera's ability to be directed up and down in a vertical plane. The camera lens can be aimed at a specific part of a scene, and in many cases the tilt can be controlled remotely.

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com

Frame Rate: The frame rate is used to describe the frequency at which a video stream is updated is measured in frames per second (fps). If you want more accurate video then the frame rate should be kept high. Lower the frame rate, lesser the image details.

Gain Control: When camera produces a quality picture, it needs a sufficient amount of light to produce a minimum stable picture, in case the light condition reduces to a certain level, there is insufficient light to the camera to create a quality video picture. AGC (Automatic gain control) increases the amount of amplification in these conditions to bring the video signal up to the minimum required level. Besides increasing picture signal, AGC also helps to reduce noise and picture attenuation.

White Balance: Automatically adjusts color settings to achieve consistent quality in the white areas and other colors of the image. Normally our eyes compensate for varying lighting conditions and makes corrections for white and color. A security camera needs to find a reference point which represents white. It will then make adjustments to all the other colors based on that white reference point.

Port Mapping/ Port forwarding: Basically used to allow traffic from the Internet to enter your local network, you will need to forward/ map the ports otherwise the router will block the request. (Eg: If you are trying to access a particular server connected in the Local network over the internet, you need to forward the port used by that server on the router to access it remotely)

This product comes with One Year warranty. For further details about warranty policy and Product Registration, please visit support section of **www.digisol.com**

☎ 1800-209-3444 (Toll Free)
helpdesk@digisol.com sales@digisol.com www.digisol.com